AUTHOR INDEX

(D) Denotes Demonstration, (T) Title only, (C) Communication, (PC) Poster Communication

ABBAS S.K., CAPLE I.W., CARE A.D., MONIZ C. & PICKARD D.W. The control of parathyroid hormone-like activity in the fetal pig. (C) 121*P*

ABRAHAMS V.C., CLINTON R.J. & DOWNEY D. Somatosensory projections to the superior colliculus of the anaesthetized cat. 563

ACHENBACH C. & DAYING Han Rate constants of beat-dependent sodium uptake and extrusion in sheep cardiac Purkinje fibres. (C) 82*P*

ADAMS L., GREEN J.F., SCHERTEL E.R. & STRONG E.B. Does the tachypnoea of hypercapnia depend on feedback from pulmonary vagal afferent receptors in dogs? (C) 100*P*

AIZENMAN Elias, FROSCH Matthew P. & LIPTON Stuart A. Responses mediated by excitatory amino acid receptors in solitary retinal ganglion cells from rat. 75

AL-BALOOL Fawzia & DEBNAM E.S. Electrophysiology of the brush-border membrane of isolated rat jejunum following chronic and acute exposure to ethanol. (PC) 148*P*

ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

AL-GAILANI B.T. & COTTERRELL D. Intracellular calcium and deformability of human red blood cell ghosts. (C) 48*P*

ALLERTON C.A., BODEN P. & HILL R.G. Actions of mu- and kappa-opioids on deep dorsal horn neurones in rat transverse spinal cord slice *in vitro*. (PC) 153*P*

ALONSO M.T., COLLAZOS J.M. & SANCHEZ A. Thrombin-induced cytoplasmic alkalinization in human platelets is not a prerequisite for Ca mobilization. (C) 45*P*

ALVARADO V., BEHN C., BONILLA S., CELEDON G., KUKULJAN M. & SANCHEZ V. Role of C-7 chlorine in calcium-dependent interactions of 7-chlorotetracycline hydrochloride (CTC) with the human red cell membrane. (C) 49*P*

ALVAREZ DE TOLEDO Guillermo & LÓPEZ-BARNEO José Ionic basis of the differential neuronal activity of guinea-pig septal nucleus studied *in vitro*. 399

ANDERSON L.C. & MIXSON E. Insulin stimulation of α-aminoisobutyric acid transport by isolated rat submandibular acinar cells. (C) 37*P*

ANDERSON Peter A.V. Physiology and pharmacology of Na^+ and Ca^{2+} currents in neurones of a jellyfish. (C) 86*P*

ANDERSON S.J. & BURR D.C. Estimates of width and length of receptive fields of motion-sensitive mechanisms in human vision. (PC) 140*P*

APPENTENG K. & MOORE J.A. The electrical geometry of rat trigeminal motoneurones. (C) 55*P*

APPENTENG K. & SAHA S. Retrograde transneuronal transport of wheat germ agglutinin into rat trigeminal interneurones. (PC) 161*P*

ARMSTRONG D.J. & KAY I.S. Indomethacin potentiates the pulmonary chemoreflex responses to 5-HT in anaesthetized rabbits. (C) 101*P*

ARNOLD C., HAFFEN K., KEDINGER M., ROCHETTE-EGLY C. & SIMON-ASSMANN P. Immunohistological localization of smooth-muscle actin during morphogenesis of normal rat and chimaeric (rat/chick and human/chick) intestines. (C) 29*P*

ARTALEJO A.R. & GARCIA-SANCHO J. Mobilization of intracellular calcium by external ATP and by calcium ionophores in the Ehrlich ascites-tumour cell. (C) 44*P*

ASHLEY C.C., ISHII N. & SIMPSON A.W.M. Measurement of intracellular free calcium concentration by fura2 in smooth-muscle cells isolated from the anterior byssus retractor muscle of *Mytilus*. (C) 79*P*

ASKING B., GARRETT J.R. & PROCTOR G.B. Effects of parotid stimulation on serum amylase in rats. (C) 117*P*

ATHERTON J.C., BIELINSKA A., DAVISON J.M., HADDON I., KAY C. & SAMUELS R. Sodium and water reabsorption in the proximal and distal nephron in conscious pregnant rats and third trimester women. 457

Bahinski A., Gadsby David C. & Nakao Masakazu Voltage independence of K translocation by the Na/K pump in isolated cells from guinea-pig ventricle. (C) 52*P*

Baker C.L., Hess R. & Zihl J. The 'motion-blind' human patient: peripheral filters. (C) 63*P*

Baker J.R., Bremner F.D., Cole J.D. & Stephens J.A. Short-term synchronization of intrinsic hand muscle motor units in a 'Deafferented' man. (PC) 155*P*

Balestrino M. & Somjen G.G. Concentration of carbon dioxide, interstitial pH and synaptic transmission in hippocampal formation of the rat. 247

Balfour W.E. Atrial natriuretic peptide (ANP) in the Brattleboro rat. (C) 108*P*

Bannister R., Bloom S.R., Cortelli P., Kooner J.S., Mathias C.J. & Raimbach Sarah J. The somatostatin analogue SMS 201-995 reduces oral glucose-induced hypotension in human autonomic failure. (C) 90*P*

Barnes P.J. *see* McCormack D.G., Clarke B. & Barnes P.J. Characterization of adenosine receptors in human pulmonary arteries. (C) 98*P*

Barnes P.J., Chung K.F., Lammers J.-W.J., McCusker M. & Minette P. Non-adrenergic bronchodilator mechanisms in man. (PC) 179*P*

Barsotti R.J., Kentish J.C., Lea T.J. & Mulligan I.P. Laser-induced photolysis of nitr-5 triggers calcium release from the sarcoplasmic reticulum of saponin-treated muscles from guinea-pig ventricle. (C) 80*P*

Bassey E.J. & Terry A.M. Blood lactate in relation to oxygen uptake during uphill treadmill walking in young and old women. (C) 104*P*

Batten T.F.C., McWilliam P.N. & Maqbool A. Distribution of calcitonin gene-related peptide (CGRP) like immunoreactivity in vagal motoneurones of the cat nucleus ambiguus. (PC) 162*P*

Baumann K.I., Hamann W. & Leung M.S. Differential suppression by neomycin of evoked response and ongoing activity in s.a. II mechanoreceptors in the cat. (C) 72*P*

Beechey R.B., Kemp R.B. & Shirazi-Beechey S.P. Changes in the intestinal transport activities of pre-ruminant lamb and adult sheep. (C) 27*P*

Behn C. *see* Alvarado V., Behn C., Bonilla S., Celedon G., Kukuljan M. & Sanchez V. Role of C-7 chlorine in calcium-dependent interactions of 7-chlorotetracycline hydrochloride (CTC) with the human red cell membrane. (C) 49*P*

Bekkers J.M., Forster I.C., Greeff N.G. & Keynes R.D. Non-inactivating sodium channels in the squid giant axon. (C) 83*P*

Belgum Jack H. & Copenhagen David R. Synaptic transfer of rod signals to horizontal and bipolar cells in the retina of the toad (*Bufo marinus*). 225

Belyavin A.J., Duggan A. & Hayes P.A. The prediction of maximum oxygen uptake for both human sexes from measurements of submaximal heart rate and body composition. (C) 103*P*

Ben-Ari Y., Cherubini E. & Krnjević K. NMDA-evoked periodic inward currents in CA3 neurones of adult and immature rat hippocampal slice. (PC) 156*P*

Bennett Max R. & Ho Stephen The formation of topographical maps in developing rat gastrocnemius muscle during synapse elimination. 471

Bennett T., Compton A.M. & Gardiner S.M. Effects of water deprivation on the regional haemodynamic responses to α-rat atrial natriuretic peptide (ANP) in conscious, unrestrained Brattleboro rats. (C) 106*P*

Bennett T., Gardiner S.M. & Tomlinson K.C. Long Evans (LE) and Brattleboro (DI) rats respond differently to administration of streptozotocin (STZ). (PC) 176*P*

Bernhardt I., Ellory J.C. & Hall A.C. Alterations to human erythrocyte passive cation permeability induced by decreasing ionic strength. (C) 47*P*

Bettaney J., Dray A. & Perkins M.N. Protein kinase C activation stimulates afferent Aδ and C-fibres in neonatal rat *in vitro*. (PC) 160*P*

Bianchini L., Ellory J.C. & Hall A.C. Stimulation of volume-sensitive KCl transport in trout hepatocytes. (PC) 172*P*

Bicknell R.J., Leng G., Lincoln D.W. & Russell J.A. Naloxone excites oxytocin neurones in the supraoptic nucleus of lactating rats after chronic morphine treatment. 297

Bicknell R.J., Dyball R.E.J., Garten L.L., Heavens R.P., Sirinathsinghji D.J.S. & Zhao B.-G. Evidence for a direct noradrenergic projection from the brain stem to the neural lobe in the rat. (C) 127*P*

Bielinska A. *see* Atherton J.C., Bielinska A., Davison J.M., Haddon I., Kay C. & Samuels R.

Sodium and water reabsorption in the proximal and distal nephron in conscious pregnant rats and third trimester women. 457

BINDER H.J. & SWEIRY J.H. Effects of dietary-sodium depletion on potassium transport in rat distal colon *in vitro*: kinetics of K absorption and the regulatory role of K secretory channels. (C) 34*P*

BISCOE T.J., DUCHEN M.R., EISNER D.A., O'NEILL S.C. & VALDEOIMILLOS M. Cyanide increases $[Ca^{2+}]_i$ in isolated type I cells from the rabbit carotid body. (C) 99*P*

BISCOE T.J., DUCHEN M.R., KIRBY G.C., PATTERSON D.L. & PONTE J. Voltage-clamp study of the effects of cyanide on dissociated Type I cells of the rabbit carotid body. (PC) 178*P*

BLACKSHAW L.A. & GRUNDY D. Splanchno-vagal convergence on to gastrointestinally modulated vagal efferent units in the ferret. (C) 35*P*

BLACKSHAW Susanna E. & THOMPSON S.W.N. Hyperpolarizing responses to stretch in sensory neurones innervating leech body wall muscle. 121

BLOOM S.R. *see* BANNISTER R., BLOOM S.R., CORTELLI P., KOONER J.S., MATHIAS C.J. & RAIMBACH Sarah J. The somatostatin analogue SMS 201-995 reduces oral glucose-induced hypotension in human autonomic failure. (C) 90*P*

BODEN P., HILL R.G. & MCBAIN C. Long-term organotypic cultures of rat hippocampal neurones display changes in neuronal excitability. (C) 60*P*

BODEN P. *see* ALLERTON C.A., BODEN P. & HILL R.G. Actions of mu- and kappa-opioids on deep dorsal horn neurones in rat transverse spinal cord slice *in vitro*. (PC) 153*P*

BOLAND P.S. & GARLAND H.O. Effects of D- and L-glucose infusions on renal function in the rat. (C) 110*P*

BONILLA S. *see* ALVARADO V., BEHN C., BONILLA S., CELEDON G., KUKULJAN M. & SANCHEZ V. Role of C-7 chlorine in calcium-dependent interactions of 7-chlorotetracycline hydrochloride (CTC) with the human red cell membrane. (C) 49*P*

BONNET C. & SAUVAN X. Elements for a psychophysics of the curvilinear and rectilinear vections in man. (PC) 133*P*

BOURDET C., DEHAY C. & KENNEDY H. Characteristics of inter- and intrahemispheric transient pathways in the young kitten. (C) 67*P*

BOUSEZ-DUMESNIL Nicole, FRUCHARD Isabelle & THORPE Simon Absolute luminance identification in humans. (PC) 132*P*

BOYETT M.R., KIRBY M.S. & ORCHARD C.H. Evidence for a calcium-activated component of the 'second inward current' in isolated ferret ventricular myocytes. (PC) 165*P*

BRADLEY P.M., DELISLE BURNS B. & WEBB A.C. Responses of the intermediate part of the medial hyperstriatum ventrale in slices of chick brain maintained *in vitro*. (C) 74*P*

BREMNER F.D. *see* BAKER J.R., BREMNER F.D., COLE J.D. & STEPHENS J.A. Short-term synchronization of intrinsic hand muscle motor units in a 'Deafferented' man. (PC) 155*P*

BRONK J.R. & HASTEWELL J.G. Pyrimidine nucleoside uptake and metabolism by rings of rat jejunum. (C) 21*P*

BROWN J. Tubular interactions of atrial peptide and captopril in man. (C) 107*P*

BROWN Nicola J. & RICHARDSON A. Effects of ileal infusion of fatty acids varying in chain length and saturation, on stomach-to-caecum transit time (SCTT) in the rat. (C) 20*P*

BROWN P.D., DHO S., ELLIOTT A.C. & LAU K.R. Acetylcholine causes a transient intracellular acidosis in isolated acini from rabbit mandibular salivary gland. (PC) 171*P*

BROWNLEE A.A., LEE G. & MILLS Ivor H. Changes in renal function produced by the Na/K ATPase inhibitor bufalin when superimposed on infusion of atrial natriuretic peptide (ANP) in rats. (C) 109*P*

BRUM Gustavo & RIOS Eduardo Erratum: *Journal of Physiology* 387 (1987). 581

BUDDINGTON R.K., DIAMOND J.M. & TOLOZA E.M. Changes in intestinal nutrient transport during ontogeny of the rabbit. (C) 28*P*

BURR D.C., MORRONE M. Concetta & SPINELLI Donatella Phase sensitivity of the human visual system. (PC) 139*P*

BURR D.C. *see* ANDERSON S.J. & BURR D.C. Estimates of width and length of receptive fields of motion-sensitive mechanisms in human vision. (PC) 140*P*

BURROWS M. Positive feedback from proprioceptors to leg motor neurones of the locust. (D) 10*P*

BURROWS M., LAURENT G. & WATSON A.H.D. The role of intersegmental interneurones in the transfer of mechanosensory information between local centres in the locust. (C) 75*P*

BYRNE S., MIALL R.C. & WEIR D.J. T.S.A.R. A programme of interactive time series analysis routines for physiological research. (D) 15*P*

CADY E.B. *see* ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

CALLEJA D.J., DENT J., TITCHEN D.A. & WOOD A.K.W. Sleeve manometry of a caudal thoracic oesophageal sphincter in sheep. (D) 12*P*

CAMERON N.E., FLOOK V., MCNAIRN F. & TURNER K.J. Investigations of muscle activity and oxygen consumption during cold exposure in man. (PC) 168*P*

CAPLE I.W. *see* ABBAS S.K., CAPLE I.W., CARE A.D., MONIZ C. & PICKARD D.W. The control of parathyroid hormone-like activity in the fetal pig. (C) 121*P*

CARE A.D. *see* ABBAS S.K., CAPLE I.W., CARE A.D., MONIZ C. & PICKARD D.W. The control of parathyroid hormone-like activity in the fetal pig. (C) 121*P*

CARTER M.R., ROWE I.C.M. & SEDGWICK E.M. D1 inhibition in man with spinal cord injury. (PC) 157*P*

CELEDON G. *see* ALVARADO V., BEHN C., BONILLA S., CELEDON G., KUKULJAN M. & SANCHEZ V. Role of C-7 chlorine in calcium-dependent interactions of 7-chlorotetracycline hydrochloride (CTC) with the human red cell membrane. (C) 49*P*

CERVERO F., HANDWERKER H.O. & LAIRD J.M.A. Responses of dorsal horn neurones in the sacral spinal cord of the rat to noxious mechanical stimulation of the tail. (C) 57*P*

CHARBARDÈS Danielle, GRIFFITHS Nina M., IMBERT-TEBOUL Martine, MOREL F. & SIMMONS N.L. Distribution of vasoactive intestinal polypeptide-sensitive adenylate cyclase activity along the rabbit kidney tubule *in vitro*. (C) 51*P*

CHENEY F.E., STILL D.L., THIBOS L.N. & WALSH D.J. What limits faithful encoding of spatial patterns in human peripheral vision? (PC) 131*P*

CHERUBINI E. *see* BEN-ARI Y., CHERUBINI E. & KRNJEVÍC K. NMDA-evoked periodic inward currents in CA3 neurones of adult and immature rat hippocampal slice. (PC) 156*P*

CHIU S.Y. Changes in excitable membrane properties in Schwann cells of adult rabbit sciatic nerves following nerve transection. 173

CHUNG K.F. *see* BARNES P.J., CHUNG K.F., LAMMERS J.-W.J., MCCUSKER M. & MINETTE P. Non-adrenergic bronchodilator mechanisms in man. (PC) 179*P*

CLARKE B. *see* MCCORMACK D.G., CLARKE B. & BARNES P.J. Characterization of adenosine receptors in human pulmonary arteries. (C) 98*P*

CLINTON R.J. *see* ABRAHAMS V.C., CLINTON R.J. & DOWNEY D. Somatosensory projections to the superior colliculus of the anaesthetized cat. 563

CODY F.W.J., PLANT T. & RICHARDSON Helen C. Electromyographic reflexes evoked in human wrist flexors by tendon extension and by joint rotation. (C) 114*P*

COLE J.D. *see* BAKER J.R., BREMNER F.D., COLE J.D. & STEPHENS J.A. Short-term synchronization of intrinsic hand muscle motor units in a 'Deafferented' man. (PC) 155*P*

COLLAZOS J.M. *see* ALONSO M.T., COLLAZOS J.M. & SANCHEZ A. Thrombin-induced cytoplasmic alkalinization in human platelets is not a prerequisite for Ca mobilization. (C) 45*P*

COLLINGRIDGE G.L. & LESTER R.A.J. Properties of a dual-component synaptic response evoked by low-frequency stimulation in rat hippocampal slices. (C) 61*P*

COLOMO F., LOMBARDI V. & PIAZZESI G. The mechanism of force generation during lengthening of tetanized frog single muscle fibres studied at different temperatures. (C) 78*P*

COMPTON A.M. *see* BENNETT T., COMPTON A.M. & GARDINER S.M. Effects of water deprivation on the regional haemodynamic responses to α-rat atrial natriuretic peptide (ANP) in conscious, unrestrained Brattleboro rats. (C) 106*P*

CONSTANTI A. & SMART T.G. Zinc blocks the A-current in cultured rat sympathetic neurones. (PC) 159*P*

COOPER Anita M. & THOMPSON Ian D. Effects of intraocular injections of tetrodotoxin on the terminal arborization of retino-collicular axons in neonatal hamsters. (PC) 142*P*

COPE M. *see* ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

COPENHAGEN David R. *see* BELGUM Jack H. & COPENHAGEN David R. Synaptic transfer of rod signals to horizontal and bipolar cells in the retina of the toad (*Bufo marinus*). 225

CORTELLI P. *see* BANNISTER R., BLOOM S.R., CORTELLI P., KOONER J.S., MATHIAS C.J. & RAIMBACH Sarah J. The somatostatin analogue SMS 201-995 reduces oral glucose-induced hypotension in human autonomic failure. (C) 90*P*

COTTERRELL D. *see* AL-GAILANI B.T. & COTTERRELL D. Intracellular calcium and deformability of human red blood cell ghosts. (C) 48*P*

COX H.M. & CUTHBERT A.W. Antisecretory mechanisms of neuropeptide Y in rat intestinal epithelia. (C) 53*P*

CRAWFORD A.C. & FETTIPLACE R. A substage cooling attachment for Zeiss IM microscopes. (D) 13*P*

CROOK J.M., LANGE-MALECKI B., LEE B.B. & VALBERG A. Visual resolution of macaque retinal ganglion cells. 205

CURTIN N.A., KOMETANI K. & WOLEDGE R.C. Effect of intracellular pH on force and heat production in isometric contraction of frog muscle fibres. 93

CUTHBERT A.W. *see* COX H.M. & CUTHBERT A.W. Antisecretory mechanisms of neuropeptide Y in rat intestinal epithelia. (C) 53*P*

DANIEL P.M., GUTHRIE D.L., PLEASANCE S.E. & WARLEY Alice A comparison between the diminished number of lymphocytes in the blood of streptozotocin- and genetically diabetic rats. (PC) 169*P*

DANTZER V. MØLLER O. & SKADHAUGE E. Morphological and enzymic adaptation to aldosterone of the epithelium of the caudal hindgut of the hen. (C) 30*P*

DASHWOOD M.R., SYKES R. & THOMPSON C.S. Diabetes-induced changes in [^{125}]Iinsulin-binding sites in the intestinal tract of the rat: an autoradiographic study. (PC) 152*P*

DAVIES Julia R. & RICHARDSON P.S. Measurement of uptake of radiolabelled amino acids into secretory cells in the cat trachea. (C) 94*P*

DAVISON J.M. *see* ATHERTON J.C., BIELINSKA A., DAVISON J.M., HADDON I., KAY C. & SAMUELS R. Sodium and water reabsorption in the proximal and distal nephron in conscious pregnant rats and third trimester women. 457

DAYING Han *see* ACHENBACH C. & DAYING Han Rate constants of beat-dependent sodium uptake and extrusion in sheep cardiac Purkinje fibres. (C) 82*P*

DEBNAM E.S. *see* AL-BALOOL Fawzia & DEBNAM E.S. Electrophysiology of the brush-border membrane of isolated rat jejunum following chronic and acute exposure to ethanol. (PC) 148*P*

DE HAAN A., HOLLANDER A.P. & SARGEANT A.J. A computer-controlled system for isovelocity measurements of *in situ* rat skeletal muscles. (D) 8*P*

DE HAAN A., JONES D.A. & SARGEANT A.J. Changes in power output during fatigue of rat medial gastrocnemius muscle. (C) 77*P*

DEHAY C. *see* BOURDET C., DEHAY C. & KENNEDY H. Characteristics of inter- and intrahemispheric transient pathways in the young kitten. (C) 67*P*

DELISLE BURNS B. *see* BRADLEY P.M., DELISLE BURNS B. & WEBB A.C. Responses of the intermediate part of the medial hyperstriatum ventrale in slices of chick brain maintained *in vitro*. (C) 74*P*

DELPY D.T. *see* ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

DENT J. *see* CALLEJA D.J., DENT J., TITCHEN D.A. & WOOD A.K.W. Sleeve manometry of a caudal thoracic oesophageal sphincter in sheep. (D) 12*P*

DESJEUX J.F. & NATH S.K. Appearance of absorptive properties in a human secreting epithelial cell line HRT-18. (C) 22*P*

DHO S. *see* BROWN P.D., DHO S., ELLIOTT A.C. & LAU K.R. Acetylcholine causes a transient intracellular acidosis in isolated acini from rabbit mandibular salivary gland. (PC) 171*P*

DIAMOND J.M. *see* BUDDINGTON R.K., DIAMOND J.M. & TOLOZA E.M. Changes in intestinal nutrient transport during ontogeny of the rabbit. (C) 28*P*

DIMALINE R., DOCKRAY G.J. & GREEN Tana The action of the cholecystokinin antagonist L364,718 on gastric emptying in the rat. (C) 17*P*

DOBBINS Janette & WRIGHT M.J. Spatiotemporal inhomogeneity for motion and flicker in central and peripheral vision in humans. (PC) 134*P*

DOCKRAY G.J. *see* DIMALINE R., DOCKRAY G.J. & GREEN Tana The action of the cholecystokinin antagonist L364,718 on gastric emptying in the rat. (C) 17*P*

DOLPHIN A.C. & SCOTT R.H. Intracellular GTP-γ-S promotes agonist effects of calcium channel ligands on calcium channel currents in cultured rat sensory neurones. (C) 85*P*

DOWNEY D. *see* ABRAHAMS V.C., CLINTON R.J. & DOWNEY D. Somatosensory projections to the superior colliculus of the anaesthetized cat. 563

DRAY A. *see* BETTANEY J., DRAY A. & PERKINS M.N. Protein kinase C activation stimulates afferent Aδ and C-fibres in neonatal rat *in vitro*. (PC) 160*P*

DUCHEN M.R. *see* BISCOE T.J., DUCHEN M.R., EISNER D.A., O'NEILL S.C. & VALDEOIMILLOS M. Cyanide increases $[Ca^{2+}]_i$ in isolated type I cells from the rabbit carotid body. (C) 99*P*

DUCHEN M.R. *see* BISCOE T.J., DUCHEN M.R., KIRBY G.C., PATTERSON D.L. & PONTE J. Voltage-clamp study of the effects of cyanide on dissociated Type I cells of the rabbit carotid body. (PC) 178*P*

DUGGAN A. *see* BELYAVIN A.J., DUGGAN A. & HAYES P.A. The prediction of maximum oxygen uptake for both human sexes from measurements of submaximal heart rate and body composition. (C) 103*P*

DUNCAN G., MARCANTONIO J.M. & STEWART S. pH and voltage modulate communication between tissue-cultured human lens epithelial cells. (C) 42*P*

DURAND Jacques, DURAND-ARCZYNSKA Wanda & WANKMILLER Daniela Coupling of active sodium transport to oxidative metabolism in the rabbit distal colon. 55

DURAND-ARCZYNSKA Wanda *see* DURAND Jacques, DURAND-ARCZYNSKA Wanda & WANKMILLER Daniela Coupling of active sodium transport to oxidative metabolism in the rabbit distal colon. 55

DYBALL R.E.J. *see* BICKNELL R.J., DYBALL R.E.J., GARTEN L.L., HEAVENS R.P., SIRINATHSINGHJI D.J.S. & ZHAO B.-G. Evidence for a direct noradrenergic projection from the brain stem to the neural lobe in the rat. (C) 127*P*

EDELSTYN N.M.J. & HAMMOND P. Correlation of texture-sensitive complex cells with cortical layering of feline striate cortex. (PC) 145*P*

EDMUNDS M.E., RUSSELL G.I. & SWALES J.D. Measurement of vascular capacitance before and after surgical reversal of two-kidney, one-clip hypertension in rats. (C) 112*P*

EISENBERG R.S., HAINSWORTH Atticus H. & LEVIS R.A. Open-channel noise in a cation channel of frog lens epithelium. (C) 84*P*

EISNER D.A. *see* BISCOE T.J., DUCHEN M.R., EISNER D.A., O'NEILL S.C. & VALDEOIMILLOS M. Cyanide increases $[Ca^{2+}]_i$ in isolated type I cells from the rabbit carotid body. (C) 99*P*

EKSTRÖM J., HÅKANSON R., MÅNSSON B. & TOBIN G. Effects of a tachykinin antagonist on ferret salivary secretion. (C) 115*P*

EL-BASSIONY S.F., EL NADY A.H., EL NAHAS M.R., MESIHA R.KH. & METIAS E.F. Effect of verapamil on insulin release and on glucose uptake by adipose and muscle tissues in the rat. (C) 120*P*

ELLIOTT A.C. *see* BROWN P.D., DHO S., ELLIOTT A.C. & LAU K.R. Acetylcholine causes a transient intracellular acidosis in isolated acini from rabbit mandibular salivary gland. (PC) 171*P*

ELLORY J.C. *see* BERNHARDT I., ELLORY J.C. & HALL A.C. Alterations to human erythrocyte passive cation permeability induced by decreasing ionic strength. (C) 47*P*

ELLORY J.C. *see* BIANCHINI L., ELLORY J.C. & HALL A.C. Stimulation of volume-sensitive KCl transport in trout hepatocytes. (PC) 172*P*

EL NADY A.H. *see* EL-BASSIONY S.F., EL NADY A.H., EL NAHAS M.R., MESIHA R.KH. & METIAS E.F. Effect of verapamil on insulin release and on glucose uptake by adipose and muscle tissues in the rat. (C) 120*P*

EL NAHAS M.R. *see* EL-BASSIONY S.F., EL NADY A.H., EL NAHAS M.R., MESIHA R.KH. & METIAS E.F. Effect of verapamil on insulin release and on glucose uptake by adipose and muscle tissues in the rat. (C) 120*P*

ELZINGA G., STIENEN G.J.M. & WILSON M.G.A. Force production in isolated frog muscle fibres before and after chemical skinning. (C) 76*P*

ESTAVILLO Jaime A. Changes in ventilation by increased venous CO_2 with constant arterial blood gases in the domestic fowl. (C) 97*P*

ETTEMA G. & HUIJING P.A. Influence of amplitude of quick releases on compliance measurement of rat EDL muscle-tendon complex. (PC) 167*P*

EYRE J.A. & KOH T.H.H.G. Maturation of descending motor pathways in man from birth to adulthood. (C) 58*P*

EYRE J.A., FLECKNELL P.A., KENYON B.R., KOH T.H.H.G. & MILLER S. Effects of electromagnetic stimulation of the brain on cortical activity, cortical blood flow, blood pressure and heart rate in the cat. (PC) 154*P*

FALK G. & SHIELLS R.A. Electrophysiological evidence for light-dependent ADP-ribosylation in salamander rods: a control mechanism in phototransduction. (PC) 128*P*

FETTIPLACE R. *see* CRAWFORD A.C. & FETTIPLACE R. A substage cooling attachment for Zeiss IM microscopes. (D) 13*P*

FLECKNELL P.A. *see* EYRE J.A., FLECKNELL P.A., KENYON B.R., KOH T.H.H.G. & MILLER S. Effects of electromagnetic stimulation of the brain on cortical activity, cortical blood flow, blood pressure and heart rate in the cat. (PC) 154*P*

FLOOK V. *see* CAMERON N.E., FLOOK V., MCNAIRN F. & TURNER K.J. Investigations of muscle activity and oxygen consumption during cold exposure in man. (PC) 168*P*

FORSLING Mary L., PEYSNER K. & VALENTINE P. The effects of acute administration of ovarian steroids on vasopressin secretion and fluid balance in the ovariectomized rat. (C) 124*P*

FORSTER I.C. *see* BEKKERS J.M., FORSTER I.C., GREEFF N.G. & KEYNES R.D. Non-inactivating sodium channels in the squid giant axon. (C) 83*P*

FORSYTHE Ian D. & WESTBROOK Gary L. Slow excitatory postsynaptic currents mediated by *N*-methyl-D-aspartate receptors on cultured mouse central neurones. 515

FREEMAN R.D., OHZAWA I. & ROBSON J.G. A comparison of monocular and binocular inhibitory processes in the visual cortex of the cat. (C) 69*P*

FROSCH Matthew P. *see* AIZENMAN Elias, FROSCH Matthew P. & LIPTON Stuart A. Responses mediated by excitatory amino acid receptors in solitary retinal ganglion cells from rat. 75

FRUCHARD Isabelle *see* BOUSEZ-DUMESNIL Nicole, FRUCHARD Isabelle & THORPE Simon Absolute luminance identification in humans. (PC) 132*P*

FRY D.J. & SHAW S.R. Effects of anisotonic media on cell volume in oocytes isolated from the amphibians *Bufo bufo* and *Xenopus laevis*. (PC) 174*P*

GADSBY David C. *see* BAHINSKI A., GADSBY David C. & NAKAO Masakazu Voltage independence of K translocation by the Na/K pump in isolated cells from guinea-pig ventricle. (C) 52*P*

GALLO JR L., MACIEL B.C., MANÇO J.C. & MARIN NETO J.A. Limitations of facial immersion as a test of parasympathetic activity in man. 1

GARCIA-SANCHO J. *see* ARTALEJO A.R. & GARCIA-SANCHO J. Mobilization of intracellular calcium by external ATP and by calcium ionophores in the Ehrlich ascites-tumour cell. (C) 44*P*

GARDINER S.M. *see* BENNETT T., COMPTON A.M. & GARDINER S.M. Effects of water deprivation on the regional haemodynamic responses to α-rat atrial natriuretic peptide (ANP) in conscious, unrestrained Brattleboro rats. (C) 106*P*

GARDINER S.M. *see* BENNETT T., GARDINER S.M. & TOMLINSON K.C. Long Evans (LE) and Brattleboro (DI) rats respond differently to administration of streptozotocin (STZ). (PC) 176*P*

GARLAND H.O. *see* BOLAND P.S. & GARLAND H.O. Effects of D- and L-glucose infusions on renal function in the rat. (C) 110*P*

GARRETT J.R. *see* ASKING B., GARRETT J.R. & PROCTOR G.B. Effects of parotid stimulation on serum amylase in rats. (C) 117*P*

GARTEN L.L. *see* BICKNELL R.J., DYBALL R.E.J., GARTEN L.L., HEAVENS R.P., SIRINATHSINGHJI D.J.S. & ZHAO B.-G. Evidence for a direct noradrenergic projection from the brain stem to the neural lobe in the rat. (C) 127*P*

GEMPERLEIN R., PAUL R. & STEINER A. Spectral sensitivity of insects studied with Fourier-interferometric stimulation (FIS). (PC) 129*P*

GEMPERLEIN R., PAUL R. & STEINER A. Spectral sensitivity of man studied with Fourier-interferometric stimulation (FIS). (PC) 130*P*

GILLESPIE J.I. & GREENWELL J.R. Regulation of intracellular pH in isolated somites of the early chick embryo: evidence for Na^+/HCO_3^- co-transport. (C) 41*P*

GIRALDEZ F., SEPÚLVEDA F.V. & SHEPPARD D.N. Ba^{2+} blockade of a large-conductance Ca^{2+}-activated K^+-channel from isolated *Necturus* enterocytes. (C) 24*P*

GOLDEN F.ST.C. & TIPTON M.J. Human adaptation to repeated cold immersions. 349

GRASSI C. & PASSATORE M. Sympathetic nervous action on rabbit jaw muscles. (C) 54*P*

GRAY P.T.A. Agonist-evoked oscillations of cytosolic free calcium in single rat parotid acinar cells. (C) 116*P*

GREEFF N.G. *see* BEKKERS J.M., FORSTER I.C., GREEFF N.G. & KEYNES R.D. Non-inactivating sodium channels in the squid giant axon. (C) 83*P*

GREEN J.F. *see* ADAMS L., GREEN J.F., SCHERTEL E.R. & STRONG E.B. Does the tachypnoea of hypercapnia depend on feedback from pulmonary vagal afferent receptors in dogs? (C) 100*P*

GREEN Tana *see* DIMALINE R., DOCKRAY G.J. & GREEN Tana The action of the cholecystokinin antagonist L364,718 on gastric emptying in the rat. (C) 17*P*

GREENWELL J.R. *see* GILLESPIE J.I. & GREENWELL J.R. Regulation of intracellular pH in isolated somites of the early chick embryo: evidence for Na^+/HCO_3^- co-transport. (C) 41*P*

GREGORY P.C., MCFADYEN M. & RAYNER D.V. Regulation of stomach emptying in pigs. (C) 18*P*

GRIFFITHS Nina M. *see* CHARBARDÈS Danielle, GRIFFITHS Nina M., IMBERT-TEBOUL Martine, MOREL F. & SIMMONS N.L. Distribution of vasoactive intestinal polypeptide-sensitive adenylate cyclase activity along the rabbit kidney tubule *in vitro*. (C) 51*P*

GRUNDY D. *see* BLACKSHAW L.A. & GRUNDY D. Splanchno-vagal convergence on to gastrointestinally modulated vagal efferent units in the ferret. (C) 35*P*

GUTHRIE D.L. *see* DANIEL P.M., GUTHRIE D.L., PLEASANCE S.E. & WARLEY Alice A comparison between the diminished number of lymphocytes in the blood of streptozotocin- and genetically diabetic rats. (PC) 169*P*

HADDON I. *see* ATHERTON J.C., BIELINSKA A., DAVISON J.M., HADDON I., KAY C. & SAMUELS R. Sodium and water reabsorption in the proximal and distal nephron in conscious pregnant rats and third trimester women. 457

HAFFEN K. *see* ARNOLD C., HAFFEN K., KEDINGER M., ROCHETTE-EGLY C. & SIMON-ASSMANN P. Immunohistological localization of smooth-muscle actin during morphogenesis of normal rat and chimaeric (rat/chick and human/chick) intestines. (C) 29*P*

HAINSWORTH Atticus H. *see* EISENBERG R.S., HAINSWORTH Atticus H. & LEVIS R.A. Open-channel noise in a cation channel of frog lens epithelium. (C) 84*P*

HÅKANSON R. *see* EKSTRÖM J., HÅKANSON R., MÅNSSON B. & TOBIN G. Effects of a tachykinin antagonist on ferret salivary secretion. (C) 115*P*

HALL A.C. *see* BERNHARDT I., ELLORY J.C. & HALL A.C. Alterations to human erythrocyte passive cation permeability induced by decreasing ionic strength. (C) 47*P*

HALL A.C. *see* BIANCHINI L., ELLORY J.C. & HALL A.C. Stimulation of volume-sensitive KCl transport in trout hepatocytes. (PC) 172*P*

HAMANN W. *see* BAUMANN K.I., HAMANN W. & LEUNG M.S. Differential suppression by neomycin of evoked response and ongoing activity in s.a. II mechanoreceptors in the cat. (C) 72*P*

HAMMOND P. *see* EDELSTYN N.M.J. & HAMMOND P. Correlation of texture-sensitive complex cells with cortical layering of feline striate cortex. (PC) 145*P*

HANDWERKER H.O. *see* CERVERO F., HANDWERKER H.O. & LAIRD J.M.A. Responses of dorsal horn neurones in the sacral spinal cord of the rat to noxious mechanical stimulation of the tail. (C) 57*P*

HARDIE R.C. The use of local ionophoresis to identify neurotransmitter candidates in the housefly, *Musca domestica*. (D) 7*P*

HASTEWELL J.G. *see* BRONK J.R. & HASTEWELL J.G. Pyrimidine nucleoside uptake and metabolism by rings of rat jejunum. (C) 21*P*

HAWKEN M.J., PARKER A.J. & SIMMONS D.R. Human contrast thresholds for a stereoscopic depth-discrimination task are no higher than those for simple monocular detection. (PC) 137*P*

HAYES P.A. *see* BELYAVIN A.J., DUGGAN A. & HAYES P.A. The prediction of maximum oxygen uptake for both human sexes from measurements of submaximal heart rate and body composition. (C) 103*P*

HEAVENS R.P. *see* BICKNELL R.J., DYBALL R.E.J., GARTEN L.L., HEAVENS R.P., SIRINATHSINGHJI D.J.S. & ZHAO B.-G. Evidence for a direct noradrenergic projection from the brain stem to the neural lobe in the rat. (C) 127*P*

HERZIG Stefan, LÜLLMANN Heinz, MOHR Klaus & SCHMITZ Ralf Interpretation of [^{3}H]ouabain binding in guinea-pig ventricular myocardium in relation to sodium pump activity. 105

HESS R. *see* BAKER C.L., HESS R. & ZIHL J. The 'motion-blind' human patient: peripheral filters. (C) 63*P*

HESS R.F. & POINTER J.S. The contrast sensitivity gradient along the horizontal visual field in man. (PC) 136*P*

HILL R.G. *see* BODEN P., HILL R.G. & MCBAIN C. Long-term organotypic cultures of rat hippocampal neurones display changes in neuronal excitability. (C) 60*P*

HILL R.G. *see* ALLERTON C.A., BODEN P. & HILL R.G. Actions of mu- and kappa-opioids on deep dorsal horn neurones in rat transverse spinal cord slice *in vitro*. (PC) 153*P*

HIRSCH Judith A. & OERTEL Donata Intrinsic properties of neurones in the dorsal cochlear nucleus of mice, *in vitro*. 535

HIRSCH Judith A. & OERTEL Donata Synaptic connections in the dorsal cochlear nucleus of mice, *in vitro*. 549

Ho Stephen *see* BENNETT Max R. & Ho Stephen The formation of topographical maps in developing rat gastrocnemius muscle during synapse elimination. 471

HOLLANDER A.P. *see* DE HAAN A., HOLLANDER A.P. & SARGEANT A.J. A computer-controlled system for isovelocity measurements of *in situ* rat skeletal muscles. (D) 8*P*

HUGHES S.W., SMITH S.A. & SMITH S.E. On-line analysis of electrocardiograph R-R intervals by microcomputer. (D) 5*P*

HUGHES Sharon & SMITH Margaret E. Effect of nerve section on β-endorphin and α-melanotropin immunoreactivity in motoneurones of normal and dystrophic mice. (C) 70*P*

HUIJING P.A. *see* ETTEMA G. & HUIJING P.A. Influence of amplitude of quick releases on compliance measurement of rat EDL muscle-tendon complex. (PC) 167*P*

HUTCHINGS M.E. The gerbil as an animal model of otitis media with effusion. (PC) 175*P*

HUTTON Michael, PILOT Marie-Anne, PRIMI Marie-Pierre, THOMPSON Hilary & ZARA Gian-Paolo Effects of alpha-2 agents and capsaicin on intestinal transit after laparotomy in the rat. (PC) 151*P*

IBU J.O. & RUTISHAUSER S. Gastric acid secretion in streptozotocin-induced diabetic rats. (C) 16*P*

IGGO A. & PACITTI E.G. Effect of naloxone on the response of rat SA1 cutaneous mechanoreceptors to mechanical stimulation. (C) 73*P*

ILES J.F. & PISINI J.V. Modulation of spinal reciprocal inhibition from the motor cortex in man. (C) 56*P*

IMBERT-TEBOUL Martine *see* CHARBARDÈS Danielle, GRIFFITHS Nina M., IMBERT-TEBOUL Martine, MOREL F. & SIMMONS N.L. Distribution of vasoactive intestinal polypeptide-sensitive adenylate cyclase activity along the rabbit kidney tubule *in vitro*. (C) 51*P*

ISHII N. *see* ASHLEY C.C., ISHII N. & SIMPSON A.W.M. Measurement of intracellular free calcium concentration by fura2 in smooth-muscle cells isolated from the anterior byssus retractor muscle of *Mytilus*. (C) 79*P*

JAMES P.S., SMITH M.W. & TIVEY D.R. Disaccharidase activity measurements carried out on intact isolated mouse intestinal villi. (D) 3*P*

JAMES P.S. & SMITH M.W. Rat jejunal lactase activity decreases biphasically during early post-weaning development. (C) 25*P*

JARAMILLO Fernán & SCHUETZE Stephen M. Kinetic differences between embryonic- and adult-type acetylcholine receptors in rat myotubes. 267

JARVIS S.M. & LEE C.W. Characterization of adenosine transport into guinea-pig cerebral cortical synaptosomes. (C) 39*P*

JAVADNIA Atefeh & RUDDOCK K.H. Simultaneous processing of pattern orientation and colour by the human visual system. (C) 68*P*

JONES D.A. *see* DE HAAN A., JONES D.A. & SARGEANT A.J. Changes in power output during fatigue of rat medial gastrocnemius muscle. (C) 77*P*

KAUFMAN Susan & MONCKTON Elizabeth A. Effect of peripherally administered atriopeptin III on water intake in rats. 379

KAWENOKI I., PRALONG W.F. & STRAUB R.W. Effects of Ca^{2+} and adenosine on NADH fluorescence of isolated rabbit nerve fibres at rest and during activity. (PC) 163*P*

KAY C. *see* ATHERTON J.C., BIELINSKA A., DAVISON J.M., HADDON I., KAY C. & SAMUELS R. Sodium and water reabsorption in the proximal and distal nephron in conscious pregnant rats and third trimester women. 457

KAY I.S. *see* ARMSTRONG D.J. & KAY I.S. Indomethacin potentiates the pulmonary chemoreflex responses to 5-HT in anaesthetized rabbits. (C) 101*P*

KEDINGER M. *see* ARNOLD C., HAFFEN K., KEDINGER M., ROCHETTE-EGLY C. & SIMON-ASSMANN P. Immunohistological localization of smooth-muscle actin during morphogenesis of normal rat and chimaeric (rat/chick and human/chick) intestines. (C) 29*P*

KEMP R.B. *see* BEECHEY R.B., KEMP R.B. & SHIRAZI-BEECHEY S.P. Changes in the intestinal transport activities of pre-ruminant lamb and adult sheep. (C) 27*P*

KENNEDY H. *see* BOURDET C., DEHAY C. & KENNEDY H. Characteristics of inter- and intrahemispheric transient pathways in the young kitten. (C) 67*P*

KENTISH J.C. *see* BARSOTTI R.J., KENTISH J.C., LEA T.J. & MULLIGAN I.P. Laser-induced photolysis of nitr-5 triggers calcium release from the sarcoplasmic reticulum of saponin-treated muscles from guinea-pig ventricle. (C) 80*P*

KENYON B.R. *see* EYRE J.A., FLECKNELL P.A., KENYON B.R., KOH T.H.H.G. & MILLER S. Effects of electromagnetic stimulation of the brain on cortical activity, cortical blood flow, blood pressure and heart rate in the cat. (PC) 154*P*

KERNAN R.P. Effect of streptozotocin diabetes and of subsequent insulin injection on intracellular activities of sodium, potassium and hydrogen ions in rat soleus muscle. (C) 119*P*

KESBY G.J. & LUMBERS Eugenie R. The effects of metabolic acidosis on renal function of fetal sheep. 65

KEYNES R.D. *see* BEKKERS J.M., FORSTER I.C., GREEFF N.G. & KEYNES R.D. Non-inactivating sodium channels in the squid giant axon. (C) 83*P*

KIORPES Lynne & MOVSHON J. Anthony The development of vernier acuity and spatial resolution in infant monkeys (*Macaca nemestrina*). (PC) 141*P*

KIRBY G.C. *see* BISCOE T.J., DUCHEN M.R., KIRBY G.C., PATTERSON D.L. & PONTE J. Voltage-clamp study of the effects of cyanide on dissociated Type I cells of the rabbit carotid body. (PC) 178*P*

KIRBY M.S. *see* BOYETT M.R., KIRBY M.S. & ORCHARD C.H. Evidence for a calcium-activated component of the 'second inward current' in isolated ferret ventricular myocytes. (PC) 165*P*

KNIGHT C.H. & MCLELLAND Jean Effects of a concurrent pregnancy or of steroid hormone treatment on milk yield of mice undergoing extended lactation. (C) 123*P*

KOH T.H.H.G. *see* EYRE J.A. & KOH T.H.H.G. Maturation of descending motor pathways in man from birth to adulthood. (C) 58*P*

KOH T.H.H.G. *see* EYRE J.A., FLECKNELL P.A., KENYON B.R., KOH T.H.H.G. & MILLER S. Effects of electromagnetic stimulation of the brain on cortical activity, cortical blood flow, blood pressure and heart rate in the cat. (PC) 154*P*

KOMETANI K. *see* CURTIN N.A., KOMETANI K. & WOLEDGE R.C. Effect of intracellular pH on force and heat production in isometric contraction of frog muscle fibres. 93

KOONER J.S. *see* BANNISTER R., BLOOM S.R., CORTELLI P., KOONER J.S., MATHIAS C.J. & RAIMBACH Sarah J. The somatostatin analogue SMS 201-995 reduces oral glucose-induced hypotension in human autonomic failure. (C) 90*P*

KORDY M.T., MOHIADDIN R.H. & SANFORD P.A. The influence of a bile acid on afferent nerve discharges from rat ileum *in vivo*. (C) 36*P*

KRNJEVÍC K. *see* BEN-ARI Y., CHERUBINI E. & KRNJEVÍC K. NMDA-evoked periodic inward currents in CA3 neurones of adult and immature rat hippocampal slice. (PC) 156*P*

KUKULJAN M. *see* ALVARADO V., BEHN C., BONILLA S., CELEDON G., KUKULJAN M. & SANCHEZ V. Role of C-7 chlorine in calcium-dependent interactions of 7-chlorotetracycline hydrochloride (CTC) with the human red cell membrane. (C) 49*P*

LAIRD J.M.A. *see* CERVERO F., HANDWERKER H.O. & LAIRD J.M.A. Responses of dorsal horn neurones in the sacral spinal cord of the rat to noxious mechanical stimulation of the tail. (C) 57*P*

LAMB T.D. & MATTHEWS H.R. A real-time image processor: use with optical probes and in other physiological applications. (D) 9*P*

LAMMERS J.-W.J. *see* BARNES P.J., CHUNG K.F., LAMMERS J.-W.J., MCCUSKER M. & MINETTE P. Non-adrenergic bronchodilator mechanisms in man. (PC) 179*P*

LANGE-MALECKI B. *see* CROOK J.M., LANGE-MALECKI B., LEE B.B. & VALBERG A. Visual resolution of macaque retinal ganglion cells. 205

LARMET Y. & PICHON Y. Lack of potassium accumulation in fresh axons of *Loligo forbesi*. (PC) 166*P*

LAU K.R. *see* BROWN P.D., DHO S., ELLIOTT A.C. & LAU K.R. Acetylcholine causes a transient intracellular acidosis in isolated acini from rabbit mandibular salivary gland. (PC) 171*P*

LAUGHLIN S.B. Investigating conductance changes of small diameter interneurones of the blowfly compound eye with a discontinuous current clamp. (D) 6*P*

LAURENT G. *see* BURROWS M., LAURENT G. & WATSON A.H.D. The role of intersegmental interneurones in the transfer of mechanosensory information between local centres in the locust. (C) 75*P*

LAW R.O. A possible volume-regulatory Na-amino acid co-transporter in rat renal papillary cells. (C) 50*P*

LAWSON S.N. & MCCARTHY P.W. Substance P-like immunoreactivity is found in primary afferent neurones with Aδ- as well as those with C-fibres, in the rat *in vitro*. (C) 71*P*

LEA T.J. *see* BARSOTTI R.J., KENTISH J.C., LEA T.J. & MULLIGAN I.P. Laser-induced photolysis of nitr-5 triggers calcium release from the sarcoplasmic reticulum of saponin-treated muscles from guinea-pig ventricle. (C) 80*P*

LEE B.B. *see* CROOK J.M., LANGE-MALECKI B., LEE B.B. & VALBERG A. Visual resolution of macaque retinal ganglion cells. 205

LEE C.W. *see* JARVIS S.M. & LEE C.W. Characterization of adenosine transport into guinea-pig cerebral cortical synaptosomes. (C) 39*P*

LEE G. *see* BROWNLEE A.A., LEE G. & MILLS Ivor H. Changes in renal function produced by the Na/K ATPase inhibitor bufalin when superimposed on infusion of atrial natriuretic peptide (ANP) in rats. (C) 109*P*

LENG G. *see* BICKNELL R.J., LENG G., LINCOLN D.W. & RUSSELL J.A. Naloxone excites oxytocin neurones in the supraoptic nucleus of lactating rats after chronic morphine treatment. 297

LEPAGNOL J.M. & WEINACHTER S.N. *In vitro* and *in vivo* effects of almitrine on oxidative phosphorylation in mitochondria isolated from rat brain. (C) 92*P*

LESTER R.A.J. *see* COLLINGRIDGE G.L. & LESTER R.A.J. Properties of a dual-component synaptic response evoked by low-frequency stimulation in rat hippocampal slices. (C) 61*P*

LEUNG M.S. *see* BAUMANN K.I., HAMANN W. & LEUNG M.S. Differential suppression by neomycin of evoked response and ongoing activity in s.a. II mechanoreceptors in the cat. (C) 72*P*

LEVIN R.J., NZEGWU Helen C. & YOUNG A. Proximal colon secretion in fed and fasted rats. (C) 33*P*

LEVIN R.J. & YOUNG A. Differential changes in electrogenic ion transport associated with progressive starvation and refeeding in the rat small intestine. (PC) 149*P*

LEVIS R.A. *see* EISENBERG R.S., HAINSWORTH Atticus H. & LEVIS R.A. Open-channel noise in a cation channel of frog lens epithelium. (C) 84*P*

LIGHTMAN S.L., MORATALLA R. & VALLEJO M. Vasopressin activates polyphosphoinositide metabolism in the brain stem of rats *in vivo*. (C) 125*P*

LIGHTMAN S.L. & SECKL J.R. Effect of intracerebroventricular oxytocin on milking-induced oxytocin secretion in the goat. (PC) 170*P*

LINCOLN D.W. *see* BICKNELL R.J., LENG G., LINCOLN D.W. & RUSSELL J.A. Naloxone excites oxytocin neurones in the supraoptic nucleus of lactating rats after chronic morphine treatment. 297

LIPTON Stuart A. *see* AIZENMAN Elias, FROSCH Matthew P. & LIPTON Stuart A. Responses mediated by excitatory amino acid receptors in solitary retinal ganglion cells from rat. 75

LLOYD Julia & MARSHALL Janice The influence of vasopressin on muscle microcirculation during systemic hypoxia in the rat. (C) 88*P*

LOMBARDI V. *see* COLOMO F., LOMBARDI V. & PIAZZESI G. The mechanism of force generation during lengthening of tetanized frog single muscle fibres studied at different temperatures. (C) 78*P*

LÓPEZ-BARNEO José *see* ALVAREZ DE TOLEDO Guillermo & LÓPEZ-BARNEO José Ionic basis of the differential neuronal activity of guinea-pig septal nucleus studied *in vitro*. 399

LÓPEZ-BURILLO S., O'BRIEN J.A. & SEPÚLVEDA F.V. Effects of Ni^{2+} on Ca^{2+}-dependent activation of K^+ permeability in MDCK cells. (PC) 150*P*

LORENCEAU Jean Apparent speeds and directions of coherent motions. (PC) 135*P*

LÜLLMANN Heinz *see* HERZIG Stefan, LÜLLMANN Heinz, MOHR Klaus & SCHMITZ Ralf Interpretation of [^{3}H]ouabain binding in guinea-pig ventricular myocardium in relation to sodium pump activity. 105

LUMBERS Eugenie R. *see* KESBY G.J. & LUMBERS Eugenie R. The effects of metabolic acidosis on renal function of fetal sheep. 65

MCAULEY J.H. Smooth anticipatory eye movements in man when no velocity information exists. (D) 11*P*

MCBAIN C. *see* BODEN P., HILL R.G. & MCBAIN C. Long-term organotypic cultures of rat hippocampal neurones display changes in neuronal excitability. (C) 60*P*

MCCARTHY P.W. *see* LAWSON S.N. & MCCARTHY P.W. Substance P-like immunoreactivity is found in primary afferent neurones with Aδ- as well as those with C-fibres, in the rat *in vitro*. (C) 71*P*

MCCORMACK D.G., CLARKE B. & BARNES P.J. Characterization of adenosine receptors in human pulmonary arteries. (C) 98*P*

MCCULLOUGH J.S. & MCHALE N.G. Pressure flow relationships in isolated bovine mesenteric lymphatics during field stimulation. (PC) 177*P*

MCCUSKER M. *see* BARNES P.J., CHUNG K.F., LAMMERS J.-W.J., MCCUSKER M. & MINETTE P. Non-adrenergic bronchodilator mechanisms in man. (PC) 179*P*

MACDONALD I.A. & MANSELL P.I. The effect of 48 h starvation on the cardiovascular and thermogenic responses to infused adrenaline in non-obese women. (C) 113*P*

MCFADYEN M. *see* GREGORY P.C., MCFADYEN M. & RAYNER D.V. Regulation of stomach emptying in pigs. (C) 18*P*

McGeown J.G., McHale N.G. & Thornbury K.D. A study of arterial pulsation and lymph flow in an isolated sheep hindlimb preparation. (C) 105*P*

McGlone F. & Sandle G.I. Comparison of the effects of pure mineralocorticoid and glucocorticoid hormones on Na^+ and K^+ transport in isolated rat distal colon. (PC) 173*P*

McHale N.G. *see* McGeown J.G., McHale N.G. & Thornbury K.D. A study of arterial pulsation and lymph flow in an isolated sheep hindlimb preparation. (C) 105*P*

McHale N.G. *see* McCullough J.S. & McHale N.G. Pressure flow relationships in isolated bovine mesenteric lymphatics during field stimulation. (PC) 177*P*

Maciel B.C. *see* Gallo Jr L., Maciel B.C., Manço J.C. & Marin Neto J.A. Limitations of facial immersion as a test of parasympathetic activity in man. 1

Mackenzie Neill M. Quantification of the expression of membrane-bound enzymes and the immunoglobulin receptor on brush borders from the rat jejunum during ontogeny using flow cytometry. (C) 26*P*

McLaughlin Stuart & Whitaker Michael Cations that alter surface potentials of lipid bilayers increase the calcium requirement for exocytosis in sea urchin eggs. 189

McLelland Jean *see* Knight C.H. & McLelland Jean Effects of a concurrent pregnancy or of steroid hormone treatment on milk yield of mice undergoing extended lactation. (C) 123*P*

McMahon Stephen B. & Wall Patrick D. Descending excitation and inhibition of spinal cord lamina I projection neurones in the rat. (C) 59*P*

McNairn F. *see* Cameron N.E., Flook V., McNairn F. & Turner K.J. Investigations of muscle activity and oxygen consumption during cold exposure in man. (PC) 168*P*

McWilliam P.N. *see* Batten T.F.C., McWilliam P.N. & Maqbool A. Distribution of calcitonin gene-related peptide (CGRP) like immunoreactivity in vagal motoneurones of the cat nucleus ambiguus. (PC) 162*P*

Manço J.C. *see* Gallo Jr L., Maciel B.C., Manço J.C. & Marin Neto J.A. Limitations of facial immersion as a test of parasympathetic activity in man. 1

Mann G.E., Muñoz M. & Peran S. Cationic amino acid transport in the isolated perfused rat exocrine pancreas. (C) 38*P*

Mansell P.I. *see* Macdonald I.A. & Mansell P.I. The effect of 48 h starvation on the cardiovascular and thermogenic responses to infused adrenaline in non-obese women. (C) 113*P*

Månsson B. *see* Ekström J., Håkanson R., Månsson B. & Tobin G. Effects of a tachykinin antagonist on ferret salivary secretion. (C) 115*P*

Maqbool A. *see* Batten T.F.C., McWilliam P.N. & Maqbool A. Distribution of calcitonin gene-related peptide (CGRP) like immunoreactivity in vagal motoneurones of the cat nucleus ambiguus. (PC) 162*P*

Marcantonio J.M. *see* Duncan G., Marcantonio J.M. & Stewart S. pH and voltage modulate communication between tissue-cultured human lens epithelial cells. (C) 42*P*

Marin Neto J.A. *see* Gallo Jr L., Maciel B.C., Manço J.C. & Marin Neto J.A. Limitations of facial immersion as a test of parasympathetic activity in man. 1

Marrion N.V. Probable role of a GTP-binding protein in mediating M-current inhibition by muscarine in rat sympathetic neurones. (C) 87*P*

Marshall Janice *see* Lloyd Julia & Marshall Janice The influence of vasopressin on muscle microcirculation during systemic hypoxia in the rat. (C) 88*P*

Massey R.F. & Smart J.L. Effects of artificial rearing with milk substitutes on ileal enterocytes in rats. (C) 23*P*

Mathias C.J. *see* Bannister R., Bloom S.R., Cortelli P., Kooner J.S., Mathias C.J. & Raimbach Sarah J. The somatostatin analogue SMS 201-995 reduces oral glucose-induced hypotension in human autonomic failure. (C) 90*P*

Matthews H.R. *see* Lamb T.D. & Matthews H.R. A real-time image processor: use with optical probes and in other physiological applications. (D) 9*P*

Matthews H.R. A linear stepping motor microscope stage translator for fast solution changes. (D) 14*P*

Maxwell D.J. Glutamic acid decarboxylase-immunoreactive boutons are presynaptic to neurones with axons ascending the dorsal columns of the feline spinal cord. (PC) 158*P*

Mayer Mark L. & Sugiyama Kazuhide A modulatory action of divalent cations on transient outward current in cultured rat sensory neurones. 417

Meckler Robert L. & Weaver Lynne C. Characteristics of ongoing and reflex discharge of single splenic and renal sympathetic postganglionic fibres in cats. 139

MESIHA R.KH. *see* EL-BASSIONY S.F., EL NADY A.H., EL NAHAS M.R., MESIHA R.KH. & METIAS E.F. Effect of verapamil on insulin release and on glucose uptake by adipose and muscle tissues in the rat. (C) 120*P*

METIAS E.F. *see* EL-BASSIONY S.F., EL NADY A.H., EL NAHAS M.R., MESIHA R.KH. & METIAS E.F. Effect of verapamil on insulin release and on glucose uptake by adipose and muscle tissues in the rat. (C) 120*P*

MIALL R.C A study of visuo-motor interactions involved in the steering responses of flying locusts. (D) 2*P*

MIALL R.C. *see* BYRNE S., MIALL R.C. & WEIR D.J. T.S.A.R. A programme of interactive time series analysis routines for physiological research. (D) 15*P*

MIALL R.C., STEIN J.F. & WEIR D.J. Movement planning in the monkey during a visuo-motor tracking task. (C) 64*P*

MICHELL A.R. & MOSS P. Responses to water restriction in sheep excreting sodium predominantly in urine or faeces; observations at three levels of sodium intake. (C) 31*P*

MILLER S. *see* EYRE J.A., FLECKNELL P.A., KENYON B.R., KOH T.H.H.G. & MILLER S. Effects of electromagnetic stimulation of the brain on cortical activity, cortical blood flow, blood pressure and heart rate in the cat. (PC) 154*P*

MILLS Ivor H. *see* BROWNLEE A.A., LEE G. & MILLS Ivor H. Changes in renal function produced by the Na/K ATPase inhibitor bufalin when superimposed on infusion of atrial natriuretic peptide (ANP) in rats. (C) 109*P*

MINETTE P. *see* BARNES P.J., CHUNG K.F., LAMMERS J.-W.J., MCCUSKER M. & MINETTE P. Non-adrenergic bronchodilator mechanisms in man. (PC) 179*P*

MITCHELL M.A. Possible mechanisms of stimulation of peripheral 5′-mono-deiodination by thyrotrophin-releasing hormone in the domestic fowl. (C) 122*P*

MIXSON E. *see* ANDERSON L.C. & MIXSON E. Insulin stimulation of α-aminoisobutyric acid transport by isolated rat submandibular acinar cells. (C) 37*P*

MOHIADDIN R.H. *see* KORDY M.T., MOHIADDIN R.H. & SANFORD P.A. The influence of a bile acid on afferent nerve discharges from rat ileum *in vivo*. (C) 36*P*

MOHR Klaus *see* HERZIG Stefan, LÜLLMANN Heinz, MOHR Klaus & SCHMITZ Ralf Interpretation of [^{3}H]ouabain binding in guinea-pig ventricular myocardium in relation to sodium pump activity. 105

MONCKTON Elizabeth A. *see* KAUFMAN Susan & MONCKTON Elizabeth A. Effect of peripherally administered atriopeptin III on water intake in rats. 379

MONIZ C. *see* ABBAS S.K., CAPLE I.W., CARE A.D., MONIZ C. & PICKARD D.W. The control of parathyroid hormone-like activity in the fetal pig. (C) 121*P*

MOODY C.I. & SILLITO A.M. The role of the *N*-methyl-D-aspartate (NMDA) receptor in the transmission of visual information in the feline dorsal lateral geniculate nucleus (dLGN). (C) 62*P*

MOORE J.A. *see* APPENTENG K. & MOORE J.A. The electrical geometry of rat trigeminal motoneurones. (C) 55*P*

MORATALLA R. *see* LIGHTMAN S.L., MORATALLA R. & VALLEJO M. Vasopressin activates polyphosphoinositide metabolism in the brain stem of rats *in vivo*. (C) 125*P*

MOREL F. *see* CHARBARDÈS Danielle, GRIFFITHS Nina M., IMBERT-TEBOUL Martine, MOREL F. & SIMMONS N.L. Distribution of vasoactive intestinal polypeptide-sensitive adenylate cyclase activity along the rabbit kidney tubule *in vitro*. (C) 51*P*

MORRONE M. Concetta *see* BURR D.C., MORRONE M. Concetta & SPINELLI Donatella Phase sensitivity of the human visual system. (PC) 139*P*

MORRONE M. Concetta & SPEED Harriet D. The effect of visual experience on the development of cortical inhibition in cat. (PC) 143*P*

MOSS P. *see* MICHELL A.R. & MOSS P. Responses to water restriction in sheep excreting sodium predominantly in urine or faeces; observations at three levels of sodium intake. (C) 31*P*

MOTTERSHEAD J.P., NYE P.C.G. & QUIRK P.G. The effects of almitrine on electron transport in mitochondria isolated from rat liver. (C) 91*P*

MOVSHON J. Anthony *see* KIORPES Lynne & MOVSHON J. Anthony The development of vernier acuity and spatial resolution in infant monkeys (*Macaca nemestrina*). (PC) 141*P*

MULLEN K.T. & O'SULLIVAN E. Colour-contrast sensitivity across the human visual field. (C) 66*P*

MULLIGAN I.P. *see* BARSOTTI R.J., KENTISH J.C., LEA T.J. & MULLIGAN I.P. Laser-induced photolysis of nitr-5 triggers calcium release from the sarcoplasmic reticulum of saponin-treated muscles from guinea-pig ventricle. (C) 80*P*

MUÑOZ M. *see* MANN G.E., MUÑOZ M. & PERAN S. Cationic amino acid transport in the isolated perfused rat exocrine pancreas. (C) 38*P*

MURPHY P.C. & SILLITO A.M. The influence of feedback from the visual cortex on the length tuning of cells in the feline dorsal lateral geniculate nucleus (dLGN). (PC) 144*P*

MURRAY Brenda E., ROBERTS S.G.E., RUMSEY R.D.E. & SHORE P. The effect of dietary lipid on stomach-to-caecum transit time in rats. (C) 19*P*

NAKAO Masakazu *see* BAHINSKI A., GADSBY David C. & NAKAO Masakazu Voltage independence of K translocation by the Na/K pump in isolated cells from guinea-pig ventricle. (C) 52*P*

NATH S.K. *see* DESJEUX J.F. & NATH S.K. Appearance of absorptive properties in a human secreting epithelial cell line HRT-18. (C) 22*P*

NICHOLSON S.A. The influence of adenosine on the pituitary-adrenocortical axis in the rat. (C) 126*P*

NISTRI A. & SIVILOTTI Lucia Effects of GABA and related drugs on the compound action potential of the frog optic nerve *in vitro*. (PC) 146*P*

NOBLE R. & RIDDELL J.S. Cutaneous excitatory and inhibitory input to neurones of the postsynaptic dorsal column system in the cat. 497

NUSSINOVITCH I. & RAHAMIMOFF R. Ionic basis of tetanic and post-tetanic potentiation at a mammalian neuromuscular junction. 435

NYE P.C.G. *see* MOTTERSHEAD J.P., NYE P.C.G. & QUIRK P.G. The effects of almitrine on electron transport in mitochondria isolated from rat liver. (C) 91*P*

NZEGWU Helen C. *see* LEVIN R.J., NZEGWU Helen C. & YOUNG A. Proximal colon secretion in fed and fasted rats. (C) 33*P*

OBIKA L.F.O. Vasopressin is not involved in haemorrhage-induced hyperkalaemia in the rat. (C) 89*P*

O'BRIEN J.A. *see* LÓPEZ-BURILLO S., O'BRIEN J.A. & SEPÚLVEDA F.V. Effects of Ni^{2+} on Ca^{2+}-dependent activation of K^+ permeability in MDCK cells. (PC) 150*P*

O'DONNELL C.P. Estimation of mean circulatory filling pressure in the anaesthetized cat. (D) 4*P*

OERTEL Donata *see* HIRSCH Judith A. & OERTEL Donata Intrinsic properties of neurones in the dorsal cochlear nucleus of mice, *in vitro*. 535

OERTEL Donata *see* HIRSCH Judith A. & OERTEL Donata Synaptic connections in the dorsal cochlear nucleus of mice, *in vitro*. 549

OHZAWA I. *see* FREEMAN R.D., OHZAWA I. & ROBSON J.G. A comparison of monocular and binocular inhibitory processes in the visual cortex of the cat. (C) 69*P*

O'NEILL S.C. *see* BISCOE T.J., DUCHEN M.R., EISNER D.A., O'NEILL S.C. & VALDEOIMILLOS M. Cyanide increases $[Ca^{2+}]_i$ in isolated type I cells from the rabbit carotid body. (C) 99*P*

ORCHARD C.H. *see* BOYETT M.R., KIRBY M.S. & ORCHARD C.H. Evidence for a calcium-activated component of the 'second inward current' in isolated ferret ventricular myocytes. (PC) 165*P*

O'REGAN M.H. & PHILLIS J.W. Adenosine, β-oestradiol and rat cerebral cortical neurone excitability. (C) 65*P*

O'SULLIVAN E. *see* MULLEN K.T. & O'SULLIVAN E. Colour-contrast sensitivity across the human visual field. (C) 66*P*

PACITTI E.G. *see* IGGO A. & PACITTI E.G. Effect of naloxone on the response of rat SA1 cutaneous mechanoreceptors to mechanical stimulation. (C) 73*P*

PARKER A.J. *see* HAWKEN M.J., PARKER A.J. & SIMMONS D.R. Human contrast thresholds for a stereoscopic depth-discrimination task are no higher than those for simple monocular detection. (PC) 137*P*

PARKER A.J. & YANG Y. Spatial properties of stereo disparity pooling in human vision. (PC) 138*P*

PASSATORE M. *see* GRASSI C. & PASSATORE M. Sympathetic nervous action on rabbit jaw muscles. (C) 54*P*

PATTERSON D.L. *see* BISCOE T.J., DUCHEN M.R., KIRBY G.C., PATTERSON D.L. & PONTE J. Voltage-clamp study of the effects of cyanide on dissociated Type I cells of the rabbit carotid body. (PC) 178*P*

PAUL R. *see* GEMPERLEIN R., PAUL R. & STEINER A. Spectral sensitivity of insects studied with Fourier-interferometric stimulation (FIS). (PC) 129*P*

PAUL R. *see* GEMPERLEIN R., PAUL R. & STEINER A. Spectral sensitivity of man studied with Fourier-interferometric stimulation (FIS). (PC) 130*P*

PERAN S. *see* MANN G.E., MUÑOZ M. & PERAN S. Cationic amino acid transport in the isolated perfused rat exocrine pancreas. (C) 38*P*

PERKINS M.N. *see* BETTANEY J., DRAY A. & PERKINS M.N. Protein kinase C activation stimulates afferent Aδ and C-fibres in neonatal rat *in vitro*. (PC) 160*P*

PEYSNER K. *see* FORSLING Mary L., PEYSNER K. & VALENTINE P. The effects of acute administration of ovarian steroids on vasopressin secretion and fluid balance in the ovariectomized rat. (C) 124*P*

PHILLIPS M.E. & TAYLOR A. Colcemid inhibits the hydrosmotic response to vasopressin in isolated rabbit collecting tubules. (C) 46*P*

PHILLIPSON O.T. & PLUMMER C.J. Factors controlling retinal D1 and D2 dopamine receptors in the rat. (PC) 147*P*

PHILLIS J.W. *see* O'REGAN M.H. & PHILLIS J.W. Adenosine, β-oestradiol and rat cerebral cortical neurone excitability. (C) 65*P*

PIAZZESI G. *see* COLOMO F., LOMBARDI V. & PIAZZESI G. The mechanism of force generation during lengthening of tetanized frog single muscle fibres studied at different temperatures. (C) 78*P*

PICHON Y. *see* LARMET Y. & PICHON Y. Lack of potassium accumulation in fresh axons of *Loligo forbesi*. (PC) 166*P*

PICKARD D.W. *see* ABBAS S.K., CAPLE I.W., CARE A.D., MONIZ C. & PICKARD D.W. The control of parathyroid hormone-like activity in the fetal pig. (C) 121*P*

PILOT Marie-Anne *see* HUTTON Michael, PILOT Marie-Anne, PRIMI Marie-Pierre, THOMPSON Hilary & ZARA Gian-Paolo Effects of alpha-2 agents and capsaicin on intestinal transit after laparotomy in the rat. (PC) 151*P*

PISINI J.V. *see* ILES J.F. & PISINI J.V. Modulation of spinal reciprocal inhibition from the motor cortex in man. (C) 56*P*

PLANT T. *see* CODY F.W.J., PLANT T. & RICHARDSON Helen C. Electromyographic reflexes evoked in human wrist flexors by tendon extension and by joint rotation. (C) 114*P*

PLEASANCE S.E. *see* DANIEL P.M., GUTHRIE D.L., PLEASANCE S.E. & WARLEY Alice A comparison between the diminished number of lymphocytes in the blood of streptozotocin- and genetically diabetic rats. (PC) 169*P*

PLUMMER C.J. *see* PHILLIPSON O.T. & PLUMMER C.J. Factors controlling retinal D1 and D2 dopamine receptors in the rat. (PC) 147*P*

POINTER J.S. *see* HESS R.F. & POINTER J.S. The contrast sensitivity gradient along the horizontal visual field in man. (PC) 136*P*

PONTE J. *see* BISCOE T.J., DUCHEN M.R., KIRBY G.C., PATTERSON D.L. & PONTE J. Voltage-clamp study of the effects of cyanide on dissociated Type I cells of the rabbit carotid body. (PC) 178*P*

POOLE David C., WARD Susan A. & WHIPP Brian J. Control of blood-gas and acid–base status during isometric exercise in humans. 365

PRALONG W.F. *see* KAWENOKI I., PRALONG W.F. & STRAUB R.W. Effects of Ca^{2+} and adenosine on NADH fluorescence of isolated rabbit nerve fibres at rest and during activity. (PC) 163*P*

PRIMI Marie-Pierre *see* HUTTON Michael, PILOT Marie-Anne, PRIMI Marie-Pierre, THOMPSON Hilary & ZARA Gian-Paolo Effects of alpha-2 agents and capsaicin on intestinal transit after laparotomy in the rat. (PC) 151*P*

PROCTOR G.B. *see* ASKING B., GARRETT J.R. & PROCTOR G.B. Effects of parotid stimulation on serum amylase in rats. (C) 117*P*

QUIRK P.G. *see* MOTTERSHEAD J.P., NYE P.C.G. & QUIRK P.G. The effects of almitrine on electron transport in mitochondria isolated from rat liver. (C) 91*P*

RAHAMIMOFF R. *see* NUSSINOVITCH I. & RAHAMIMOFF R. Ionic basis of tetanic and post-tetanic potentiation at a mammalian neuromuscular junction. 435

RAIMBACH Sarah J. *see* BANNISTER R., BLOOM S.R., CORTELLI P., KOONER J.S., MATHIAS C.J. & RAIMBACH Sarah J. The somatostatin analogue SMS 201-995 reduces oral glucose-induced hypotension in human autonomic failure. (C) 90*P*

RAMSDEN C.A. & WALTERS D.V. Effect of amiloride on the balance between secretion and reabsorption of pulmonary liquid in the fetal and postnatal sheep. (C) 95*P*

RAYNER D.V. *see* GREGORY P.C., MCFADYEN M. & RAYNER D.V. Regulation of stomach emptying in pigs. (C) 18*P*

RAYNER Victoria C., ROBINSON I.C.A.F. & RUSSELL J.A. Chronic intracerebroventricular morphine and lactation in rats: dependence and tolerance in relation to oxytocin neurones. 319

REID A.M., SHULKES A. & TITCHEN D.A. Effects of the vagus nerves on gastric motility and release of vasoactive intestinal polypeptide in the anaesthetized lamb. 11

REID A.M. & TITCHEN D.A. Gastric electromyographic activity in the milk-fed lamb. 25

REID A.M., SHULKES A. & TITCHEN D.A. The effects of vasoactive intestinal polypeptide on gastric motility in the lamb. 41

REID A.M. & TITCHEN D.A. Atropine-resistant parasympathetic responses of the ovine parotid and submaxillary glands. (C) 118*P*

REYNOLDS E.O.R. *see* ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

RICHARDSON A. *see* BROWN Nicola J. & RICHARDSON A. Effects of ileal infusion of fatty acids varying in chain length and saturation, on stomach-to-caecum transit time (SCTT) in the rat. (C) 20*P*

RICHARDSON C.E. *see* ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

RICHARDSON Helen C. *see* CODY F.W.J., PLANT T. & RICHARDSON Helen C. Electromyographic reflexes evoked in human wrist flexors by tendon extension and by joint rotation. (C) 114*P*

RICHARDSON P.S. *see* DAVIES Julia R. & RICHARDSON P.S. Measurement of uptake of radiolabelled amino acids into secretory cells in the cat trachea. (C) 94*P*

RIDDELL J.S. *see* NOBLE R. & RIDDELL J.S. Cutaneous excitatory and inhibitory input to neurones of the postsynaptic dorsal column system in the cat. 497

RIOS Eduardo *see* BRUM Gustavo & RIOS Eduardo Erratum: *Journal of Physiology* 387 (1987). 581

ROBBINS P.A. Evidence for interaction between the peripheral and central chemoreceptors in man. (C) 102*P*

ROBERTS S.G.E. *see* MURRAY Brenda E., ROBERTS S.G.E., RUMSEY R.D.E. & SHORE P. The effect of dietary lipid on stomach-to-caecum transit time in rats. (C) 19*P*

ROBINSON I.C.A.F. *see* RAYNER Victoria C., ROBINSON I.C.A.F. & RUSSELL J.A. Chronic intracerebroventricular morphine and lactation in rats: dependence and tolerance in relation to oxytocin neurones. 319

ROBSON J.G. *see* FREEMAN R.D., OHZAWA I. & ROBSON J.G. A comparison of monocular and binocular inhibitory processes in the visual cortex of the cat. (C) 69*P*

ROCHETTE-EGLY C. *see* ARNOLD C., HAFFEN K., KEDINGER M., ROCHETTE-EGLY C. & SIMON-ASSMANN P. Immunohistological localization of smooth-muscle actin during morphogenesis of normal rat and chimaeric (rat/chick and human/chick) intestines. (C) 29*P*

ROWE I.C.M. *see* CARTER M.R., ROWE I.C.M. & SEDGWICK E.M. D1 inhibition in man with spinal cord injury. (PC) 157*P*

RUDDOCK K.H. *see* JAVADNIA Atefeh & RUDDOCK K.H. Simultaneous processing of pattern orientation and colour by the human visual system. (C) 68*P*

RUMSEY R.D.E. *see* MURRAY Brenda E., ROBERTS S.G.E., RUMSEY R.D.E. & SHORE P. The effect of dietary lipid on stomach-to-caecum transit time in rats. (C) 19*P*

RUSSELL G.I. *see* EDMUNDS M.E., RUSSELL G.I. & SWALES J.D. Measurement of vascular capacitance before and after surgical reversal of two-kidney, one-clip hypertension in rats. (C) 112*P*

RUSSELL J.A. *see* BICKNELL R.J., LENG G., LINCOLN D.W. & RUSSELL J.A. Naloxone excites oxytocin neurones in the supraoptic nucleus of lactating rats after chronic morphine treatment. 297

RUSSELL J.A. *see* RAYNER Victoria C., ROBINSON I.C.A.F. & RUSSELL J.A. Chronic intracerebroventricular morphine and lactation in rats: dependence and tolerance in relation to oxytocin neurones. 319

RUTISHAUSER S. *see* IBU J.O. & RUTISHAUSER S. Gastric acid secretion in streptozotocin-induced diabetic rats. (C) 16*P*

SAGE S.O. Kinetics of ADP-evoked and thrombin-evoked rises in cytosolic calcium in human platelets: studies with manganese and nickel. (C) 43*P*

SAHA S. *see* APPENTENG K. & SAHA S. Retrograde transneuronal transport of wheat germ agglutinin into rat trigeminal interneurones. (PC) 161*P*

SAMUELS R. *see* ATHERTON J.C., BIELINSKA A., DAVISON J.M., HADDON I., KAY C. & SAMUELS R. Sodium and water reabsorption in the proximal and distal nephron in conscious pregnant rats and third trimester women. 457

SANCHEZ A. *see* ALONSO M.T., COLLAZOS J.M. & SANCHEZ A. Thrombin-induced cytoplasmic alkalinization in human platelets is not a prerequisite for Ca mobilization. (C) 45*P*

SANCHEZ V. *see* ALVARADO V., BEHN C., BONILLA S., CELEDON G., KUKULJAN M. & SANCHEZ V. Role of C-7 chlorine in calcium-dependent interactions of 7-chlorotetracycline hydrochloride (CTC) with the human red cell membrane. (C) 49*P*

SANDLE G.I. *see* MCGLONE F. & SANDLE G.I. Comparison of the effects of pure mineralocorticoid and glucocorticoid hormones on Na^+ and K^+ transport in isolated rat distal colon. (PC) 173*P*

SANFORD P.A. *see* KORDY M.T., MOHIADDIN R.H. & SANFORD P.A. The influence of a bile acid on afferent nerve discharges from rat ileum *in vivo*. (C) 36*P*

SARGEANT A.J. *see* DE HAAN A., HOLLANDER A.P. & SARGEANT A.J. A computer-controlled system for isovelocity measurements of *in situ* rat skeletal muscles. (D) 8*P*

SARGEANT A.J. *see* DE HAAN A., JONES D.A. & SARGEANT A.J. Changes in power output during fatigue of rat medial gastrocnemius muscle. (C) 77*P*

SAUVAN X. *see* BONNET C. & SAUVAN X. Elements for a psychophysics of the curvilinear and rectilinear vections in man. (PC) 133*P*

SCHERTEL E.R. *see* ADAMS L., GREEN J.F., SCHERTEL E.R. & STRONG E.B. Does the tachypnoea of hypercapnia depend on feedback from pulmonary vagal afferent receptors in dogs? (C) 100*P*

SCHMITZ Ralf *see* HERZIG Stefan, LÜLLMANN Heinz, MOHR Klaus & SCHMITZ Ralf Interpretation of [^{3}H]ouabain binding in guinea-pig ventricular myocardium in relation to sodium pump activity. 105

SCHUETZE Stephen M. *see* JARAMILLO Fernán & SCHUETZE Stephen M. Kinetic differences between embryonic- and adult-type acetylcholine receptors in rat myotubes. 267

SCOTT R.H. *see* DOLPHIN A.C. & SCOTT R.H. Intracellular GTP-γ-S promotes agonist effects of calcium channel ligands on calcium channel currents in cultured rat sensory neurones. (C) 85*P*

SECKL J.R. *see* LIGHTMAN S.L. & SECKL J.R. Effect of intracerebroventricular oxytocin on milking-induced oxytocin secretion in the goat. (PC) 170*P*

SEDGWICK E.M. *see* CARTER M.R., ROWE I.C.M. & SEDGWICK E.M. D1 inhibition in man with spinal cord injury. (PC) 157*P*

SEPÚLVEDA F.V. *see* GIRALDEZ F., SEPÚLVEDA F.V. & SHEPPARD D.N. Ba^{2+} blockade of a large-conductance Ca^{2+}-activated K^+-channel from isolated *Necturus* enterocytes. (C) 24*P*

SEPÚLVEDA F.V. *see* LÓPEZ-BURILLO S., O'BRIEN J.A. & SEPÚLVEDA F.V. Effects of Ni^{2+} on Ca^{2+}-dependent activation of K^+ permeability in MDCK cells. (PC) 150*P*

SHAW S.R. *see* FRY D.J. & SHAW S.R. Effects of anisotonic media on cell volume in oocytes isolated from the amphibians *Bufo bufo* and *Xenopus laevis*. (PC) 174*P*

SHEPPARD D.N. *see* GIRALDEZ F., SEPÚLVEDA F.V. & SHEPPARD D.N. Ba^{2+} blockade of a large-conductance Ca^{2+}-activated K^+-channel from isolated *Necturus* enterocytes. (C) 24*P*

SHIELLS R.A. *see* FALK G. & SHIELLS R.A. Electrophysiological evidence for light-dependent ADP-ribosylation in salamander rods: a control mechanism in phototransduction. (PC) 128*P*

SHIRAZI-BEECHEY S.P. *see* BEECHEY R.B., KEMP R.B. & SHIRAZI-BEECHEY S.P. Changes in the intestinal transport activities of pre-ruminant lamb and adult sheep. (C) 27*P*

SHIRLEY D.G. & WALTER S.J. Acute changes in renal tubular function following unilateral nephrectomy in the rat. (C) 111*P*

SHORE P. *see* MURRAY Brenda E., ROBERTS S.G.E., RUMSEY R.D.E. & SHORE P. The effect of dietary lipid on stomach-to-caecum transit time in rats. (C) 19*P*

SHULKES A. *see* REID A.M., SHULKES A. & TITCHEN D.A. Effects of the vagus nerves on gastric motility and release of vasoactive intestinal polypeptide in the anaesthetized lamb. 11

SHULKES A. *see* REID A.M., SHULKES A. & TITCHEN D.A. The effects of vasoactive intestinal polypeptide on gastric motility in the lamb. 41

SILLITO A.M. *see* MOODY C.I. & SILLITO A.M. The role of the *N*-methyl-D-aspartate (NMDA) receptor in the transmission of visual information in the feline dorsal lateral geniculate nucleus (dLGN). (C) 62*P*

SILLITO A.M. *see* MURPHY P.C. & SILLITO A.M. The influence of feedback from the visual cortex on the length tuning of cells in the feline dorsal lateral geniculate nucleus (dLGN). (PC) 144*P*

SIMMONS D.R. *see* HAWKEN M.J., PARKER A.J. & SIMMONS D.R. Human contrast thresholds for a stereoscopic depth-discrimination task are no higher than those for simple monocular detection. (PC) 137*P*

SIMMONS N.L. *see* CHARBARDÈS Danielle, GRIFFITHS Nina M., IMBERT-TEBOUL Martine, MOREL F. & SIMMONS N.L. Distribution of vasoactive intestinal polypeptide-sensitive adenylate cyclase activity along the rabbit kidney tubule *in vitro*. (C) 51*P*

SIMON-ASSMANN P. *see* ARNOLD C., HAFFEN K., KEDINGER M., ROCHETTE-EGLY C. & SIMON-ASSMANN P. Immunohistological localization of smooth-muscle actin during morphogenesis of normal rat and chimaeric (rat/chick and human/chick) intestines. (C) 29*P*

SIMPSON A.W.M. *see* ASHLEY C.C., ISHII N. & SIMPSON A.W.M. Measurement of intracellular free calcium concentration by fura2 in smooth-muscle cells isolated from the anterior byssus retractor muscle of *Mytilus*. (C) 79*P*

SIRINATHSINGHJI D.J.S. *see* BICKNELL R.J., DYBALL R.E.J., GARTEN L.L., HEAVENS R.P., SIRINATHSINGHJI D.J.S. & ZHAO B.-G. Evidence for a direct noradrenergic projection from the brain stem to the neural lobe in the rat. (C) 127*P*

SIVILOTTI Lucia *see* NISTRI A. & SIVILOTTI Lucia Effects of GABA and related drugs on the compound action potential of the frog optic nerve *in vitro*. (PC) 146*P*

SKADHAUGE E. *see* DANTZER V. MØLLER O. & SKADHAUGE E. Morphological and enzymic adaptation to aldosterone of the epithelium of the caudal hindgut of the hen. (C) 30*P*

SMART J.L. *see* MASSEY R.F. & SMART J.L. Effects of artificial rearing with milk substitutes on ileal enterocytes in rats. (C) 23*P*

SMART T.G. *see* CONSTANTI A. & SMART T.G. Zinc blocks the A-current in cultured rat sympathetic neurones. (PC) 159*P*

SMITH M.W. *see* JAMES P.S., SMITH M.W. & TIVEY D.R. Disaccharidase activity measurements carried out on intact isolated mouse intestinal villi. (D) 3*P*

SMITH M.W. *see* JAMES P.S. & SMITH M.W. Rat jejunal lactase activity decreases biphasically during early post-weaning development. (C) 25*P*

SMITH Margaret E. *see* HUGHES Sharon & SMITH Margaret E. Effect of nerve section on β-endorphin and α-melanotropin immunoreactivity in motoneurones of normal and dystrophic mice. (C) 70*P*

SMITH S.A. *see* HUGHES S.W., SMITH S.A. & SMITH S.E. On-line analysis of electrocardiograph R-R intervals by microcomputer. (D) 5*P*

SMITH S.E. *see* HUGHES S.W., SMITH S.A. & SMITH S.E. On-line analysis of electrocardiograph R-R intervals by microcomputer. (D) 5*P*

SOMJEN G.G. *see* BALESTRINO M. & SOMJEN G.G. Concentration of carbon dioxide, interstitial pH and synaptic transmission in hippocampal formation of the rat. 247

SPEED Harriet D. *see* MORRONE M. Concetta & SPEED Harriet D. The effect of visual experience on the development of cortical inhibition in cat. (PC) 143*P*

SPINELLI Donatella *see* BURR D.C., MORRONE M. Concetta & SPINELLI Donatella Phase sensitivity of the human visual system. (PC) 139*P*

STEIN J.F. *see* MIALL R.C., STEIN J.F. & WEIR D.J. Movement planning in the monkey during a visuo-motor tracking task. (C) 64*P*

STEIN Reuben D. & WEAVER Lynne C. Multi- and single-fibre mesenteric and renal sympathetic response to chemical stimulation of intestinal receptors in cats. 155

STEINER A. *see* GEMPERLEIN R., PAUL R. & STEINER A. Spectral sensitivity of insects studied with Fourier-interferometric stimulation (FIS). (PC) 129*P*

STEINER A. *see* GEMPERLEIN R., PAUL R. & STEINER A. Spectral sensitivity of man studied with Fourier-interferometric stimulation (FIS). (PC) 130*P*

STEPHENS J.A. *see* BAKER J.R., BREMNER F.D., COLE J.D. & STEPHENS J.A. Short-term synchronization of intrinsic hand muscle motor units in a 'Deafferented' man. (PC) 155*P*

STEWART S. *see* DUNCAN G., MARCANTONIO J.M. & STEWART S. pH and voltage modulate communication between tissue-cultured human lens epithelial cells. (C) 42*P*

STIENEN G.J.M. *see* ELZINGA G., STIENEN G.J.M. & WILSON M.G.A. Force production in isolated frog muscle fibres before and after chemical skinning. (C) 76*P*

STILL D.L. *see* CHENEY F.E., STILL D.L., THIBOS L.N. & WALSH D.J. What limits faithful encoding of spatial patterns in human peripheral vision? (PC) 131*P*

STRAUB R.W. *see* KAWENOKI I., PRALONG W.F. & STRAUB R.W. Effects of Ca^{2+} and adenosine on NADH fluorescence of isolated rabbit nerve fibres at rest and during activity. (PC) 163*P*

STRONG E.B. *see* ADAMS L., GREEN J.F., SCHERTEL E.R. & STRONG E.B. Does the tachypnoea of hypercapnia depend on feedback from pulmonary vagal afferent receptors in dogs? (C) 100*P*

SUGIYAMA Kazuhide *see* MAYER Mark L. & SUGIYAMA Kazuhide A modulatory action of divalent cations on transient outward current in cultured rat sensory neurones. 417

SWALES J.D. *see* EDMUNDS M.E., RUSSELL G.I. & SWALES J.D. Measurement of vascular capacitance before and after surgical reversal of two-kidney, one-clip hypertension in rats. (C) 112*P*

SWEIRY J.H. *see* BINDER H.J. & SWEIRY J.H. Effects of dietary-sodium depletion on potassium transport in rat distal colon *in vitro*: kinetics of K absorption and the regulatory role of K secretory channels. (C) 34*P*

SYKES R. *see* DASHWOOD M.R., SYKES R. & THOMPSON C.S. Diabetes-induced changes in [^{125}I]insulin-binding sites in the intestinal tract of the rat: an autoradiographic study. (PC) 152*P*

TADESSE K. The effect of feeding galactose on intestinal lactase activity of the rat. (C) 32*P*

TAKANO Nariko Effects of pedal rate on respiratory responses to incremental bicycle work. 389

TAYLOR A. *see* PHILLIPS M.E. & TAYLOR A. Colcemid inhibits the hydrosmotic response to vasopressin in isolated rabbit collecting tubules. (C) 46*P*

TERRAR D.A. & WHITE E. Possible effects of calcium entry at positive potentials on contraction in voltage-clamped cells isolated from guinea-pig ventricular muscle. (C) 81*P*

TERRAR D.A. & WHITE E. Currents and contractions at positive potentials in cells isolated from guinea-pig ventricular muscle. (PC) 164*P*

TERRY A.M. *see* BASSEY E.J. & TERRY A.M. Blood lactate in relation to oxygen uptake during uphill treadmill walking in young and old women. (C) 104*P*

THIBOS L.N. *see* CHENEY F.E., STILL D.L., THIBOS L.N. & WALSH D.J. What limits faithful encoding of spatial patterns in human peripheral vision? (PC) 131*P*

THOMPSON C.S. *see* DASHWOOD M.R., SYKES R. & THOMPSON C.S. Diabetes-induced changes in [^{125}I]insulin-binding sites in the intestinal tract of the rat: an autoradiographic study. (PC) 152*P*

THOMPSON Hilary *see* HUTTON Michael, PILOT Marie-Anne, PRIMI Marie-Pierre, THOMPSON Hilary & ZARA Gian-Paolo Effects of alpha-2 agents and capsaicin on intestinal transit after laparotomy in the rat. (PC) 151*P*

THOMPSON Ian D. *see* COOPER Anita M. & THOMPSON Ian D. Effects of intraocular injections of tetrodotoxin on the terminal arborization of retino-collicular axons in neonatal hamsters. (PC) 142*P*

THOMPSON S.W.N. *see* BLACKSHAW Susanna E. & THOMPSON S.W.N. Hyperpolarizing responses to stretch in sensory neurones innervating leech body wall muscle. 121

THORNBURY K.D. *see* MCGEOWN J.G., MCHALE N.G. & THORNBURY K.D. A study of arterial pulsation and lymph flow in an isolated sheep hindlimb preparation. (C) 105*P*

THORPE Simon *see* BOUSEZ-DUMESNIL Nicole, FRUCHARD Isabelle & THORPE Simon Absolute luminance identification in humans. (PC) 132*P*

TIPTON M.J. *see* GOLDEN F.ST.C. & TIPTON M.J. Human adaptation to repeated cold immersions. 349

TITCHEN D.A. *see* REID A.M., SHULKES A. & TITCHEN D.A. Effects of the vagus nerves on gastric motility and release of vasoactive intestinal polypeptide in the anaesthetized lamb. 11

TITCHEN D.A. *see* REID A.M. & TITCHEN D.A. Gastric electromyographic activity in the milk-fed lamb. 25

TITCHEN D.A. *see* REID A.M., SHULKES A. & TITCHEN D.A. The effects of vasoactive intestinal polypeptide on gastric motility in the lamb. 41

TITCHEN D.A. *see* CALLEJA D.J., DENT J., TITCHEN D.A. & WOOD A.K.W. Sleeve manometry of a caudal thoracic oesophageal sphincter in sheep. (D) 12*P*

TITCHEN D.A. *see* REID A.M. & TITCHEN D.A. Atropine-resistant parasympathetic responses of the ovine parotid and submaxillary glands. (C) 118*P*

TIVEY D.R. *see* JAMES P.S., SMITH M.W. & TIVEY D.R. Disaccharidase activity measurements carried out on intact isolated mouse intestinal villi. (D) 3*P*

TOBIN G. *see* EKSTRÖM J., HÅKANSON R., MÅNSSON B. & TOBIN G. Effects of a tachykinin antagonist on ferret salivary secretion. (C) 115*P*

TOLOZA E.M. *see* BUDDINGTON R.K., DIAMOND J.M. & TOLOZA E.M. Changes in intestinal nutrient transport during ontogeny of the rabbit. (C) 28*P*

TOMLINSON K.C. *see* BENNETT T., GARDINER S.M. & TOMLINSON K.C. Long Evans (LE) and Brattleboro (DI) rats respond differently to administration of streptozotocin (STZ). (PC) 176*P*

TURNER K.J. *see* CAMERON N.E., FLOOK V., MCNAIRN F. & TURNER K.J. Investigations of muscle activity and oxygen consumption during cold exposure in man. (PC) 168*P*

VALBERG A. *see* CROOK J.M., LANGE-MALECKI B., LEE B.B. & VALBERG A. Visual resolution of macaque retinal ganglion cells. 205

VALDEOIMILLOS M. *see* BISCOE T.J., DUCHEN M.R., EISNER D.A., O'NEILL S.C. & VALDEOIMILLOS M. Cyanide increases $[Ca^{2+}]_i$ in isolated type I cells from the rabbit carotid body. (C) 99*P*

VALENTINE P. *see* FORSLING Mary L., PEYSNER K. & VALENTINE P. The effects of acute administration of ovarian steroids on vasopressin secretion and fluid balance in the ovariectomized rat. (C) 124*P*

VALLEJO M. *see* LIGHTMAN S.L., MORATALLA R. & VALLEJO M. Vasopressin activates polyphosphoinositide metabolism in the brain stem of rats *in vivo*. (C) 125*P*

WALL Patrick D. *see* MCMAHON Stephen B. & WALL Patrick D. Descending excitation and inhibition of spinal cord lamina I projection neurones in the rat. (C) 59*P*

WALSH D.J. *see* CHENEY F.E., STILL D.L., THIBOS L.N. & WALSH D.J. What limits faithful encoding of spatial patterns in human peripheral vision? (PC) 131*P*

WALTER S.J. *see* SHIRLEY D.G. & WALTER S.J. Acute changes in renal tubular function following unilateral nephrectomy in the rat. (C) 111*P*

WALTERS D.V. *see* RAMSDEN C.A. & WALTERS D.V. Effect of amiloride on the balance between secretion and reabsorption of pulmonary liquid in the fetal and postnatal sheep. (C) 95*P*

WANKMILLER Daniela *see* DURAND Jacques, DURAND-ARCZYNSKA Wanda & WANKMILLER Daniela Coupling of active sodium transport to oxidative metabolism in the rabbit distal colon. 55

WARD Susan A. *see* POOLE David C., WARD Susan A. & WHIPP Brian J. Control of blood-gas and acid–base status during isometric exercise in humans. 365

WARLEY Alice *see* DANIEL P.M., GUTHRIE D.L., PLEASANCE S.E. & WARLEY Alice A comparison between the diminished number of lymphocytes in the blood of streptozotocin- and genetically diabetic rats. (PC) 169*P*

WATSON A.H.D. *see* BURROWS M., LAURENT G. & WATSON A.H.D. The role of intersegmental interneurones in the transfer of mechanosensory information between local centres in the locust. (C) 75*P*

WEAVER Lynne C. *see* MECKLER Robert L. & WEAVER Lynne C. Characteristics of ongoing and reflex discharge of single splenic and renal sympathetic postganglionic fibres in cats. 139

WEAVER Lynne C. *see* STEIN Reuben D. & WEAVER Lynne C. Multi- and single-fibre mesenteric and renal sympathetic response to chemical stimulation of intestinal receptors in cats. 155

WEBB A.C. *see* BRADLEY P.M., DELISLE BURNS B. & WEBB A.C. Responses of the intermediate part of the medial hyperstriatum ventrale in slices of chick brain maintained *in vitro*. (C) 74*P*

WEBBER S.E. & WIDDICOMBE J.G. The transport of albumin and dextran across the ferret isolated trachea *in vitro*. (C) 93*P*

WEINACHTER S.N. *see* LEPAGNOL J.M. & WEINACHTER S.N. *In vitro* and *in vivo* effects of almitrine on oxidative phosphorylation in mitochondria isolated from rat brain. (C) 92*P*

WEIR D.J. *see* BYRNE S., MIALL R.C. & WEIR D.J. T.S.A.R. A programme of interactive time series analysis routines for physiological research. (D) 15*P*

WEIR D.J. *see* MIALL R.C., STEIN J.F. & WEIR D.J. Movement planning in the monkey during a visuo-motor tracking task. (C) 64*P*

WESTBROOK Gary L. *see* FORSYTHE Ian D. & WESTBROOK Gary L. Slow excitatory postsynaptic currents mediated by *N*-methyl-D-aspartate receptors on cultured mouse central neurones. 515

WHEELER C.P.D. & YUDILEVICH D.L. Uptake of uridine and its inhibition by nucleoside transport inhibitors in the perfused guinea-pig placenta. (C) 40*P*

WHIPP Brian J. *see* POOLE David C., WARD Susan A. & WHIPP Brian J. Control of blood-gas and acid–base status during isometric exercise in humans. 365

WHITAKER Michael *see* MCLAUGHLIN Stuart & WHITAKER Michael Cations that alter surface potentials of lipid bilayers increase the calcium requirement for exocytosis in sea urchin eggs. 189

WHITE E. *see* TERRAR D.A. & WHITE E. Possible effects of calcium entry at positive potentials on contraction in voltage-clamped cells isolated from guinea-pig ventricular muscle. (C) 81*P*

WHITE E. *see* TERRAR D.A. & WHITE E. Currents and contractions at positive potentials in cells isolated from guinea-pig ventricular muscle. (PC) 164*P*

WIDDICOMBE J.G. *see* WEBBER S.E. & WIDDICOMBE J.G. The transport of albumin and dextran across the ferret isolated trachea *in vitro*. (C) 93*P*

WILSON M.G.A. *see* ELZINGA G., STIENEN G.J.M. & WILSON M.G.A. Force production in isolated frog muscle fibres before and after chemical skinning. (C) 76*P*

WOLEDGE R.C. *see* CURTIN N.A., KOMETANI K. & WOLEDGE R.C. Effect of intracellular pH on force and heat production in isometric contraction of frog muscle fibres. 93

WOOD A.K.W. *see* CALLEJA D.J., DENT J., TITCHEN D.A. & WOOD A.K.W. Sleeve manometry of a caudal thoracic oesophageal sphincter in sheep. (D) 12*P*

WRAY Susan *see* ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

WRIGHT M.J. *see* DOBBINS Janette & WRIGHT M.J. Spatiotemporal inhomogeneity for motion and flicker in central and peripheral vision in humans. (PC) 134*P*

WYATT J.S. *see* ALDRIDGE R., CADY E.B., COPE M., DELPY D.T., REYNOLDS E.O.R., RICHARDSON C.E., WRAY Susan & WYATT J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. (C) 96*P*

YANG Y. *see* PARKER A.J. & YANG Y. Spatial properties of stereo disparity pooling in human vision. (PC) 138*P*

YOUNG A. *see* LEVIN R.J., NZEGWU Helen C. & YOUNG A. Proximal colon secretion in fed and fasted rats. (C) 33*P*

YOUNG A. *see* LEVIN R.J. & YOUNG A. Differential changes in electrogenic ion transport associated with progressive starvation and refeeding in the rat small intestine. (PC) 149*P*

YUDILEVICH D.L. *see* WHEELER C.P.D. & YUDILEVICH D.L. Uptake of uridine and its inhibition by nucleoside transport inhibitors in the perfused guinea-pig placenta. (C) 40*P*

ZARA Gian-Paolo *see* HUTTON Michael, PILOT Marie-Anne, PRIMI Marie-Pierre, THOMPSON Hilary & ZARA Gian-Paolo Effects of alpha-2 agents and capsaicin on intestinal transit after laparotomy in the rat. (PC) 151*P*

ZHAO B.-G. *see* BICKNELL R.J., DYBALL R.E.J., GARTEN L.L., HEAVENS R.P., SIRINATHSINGHJI D.J.S. & ZHAO B.-G. Evidence for a direct noradrenergic projection from the brain stem to the neural lobe in the rat. (C) 127*P*

ZIHL J. *see* BAKER C.L., HESS R. & ZIHL J. The 'motion-blind' human patient: peripheral filters. (C) 63*P*

CONTENTS OF VOLUME 396

February 1988

GALLO JR L., MACIEL B.C., MANÇO J.C. & MARIN NETO J.A. Limitations of facial immersion as a test of parasympathetic activity in man. 1

REID A.M., SHULKES A. & TITCHEN D.A. Effects of the vagus nerves on gastric motility and release of vasoactive intestinal polypeptide in the anaesthetized lamb. 11

REID A.M. & TITCHEN D.A. Gastric electromyographic activity in the milk-fed lamb. 25

REID A.M., SHULKES A. & TITCHEN D.A. The effects of vasoactive intestinal polypeptide on gastric motility in the lamb. 41

DURAND Jacques, DURAND-ARCZYNSKA Wanda & WANKMILLER Daniela Coupling of active sodium transport to oxidative metabolism in the rabbit distal colon. 55

KESBY G.J. & LUMBERS Eugenie R. The effects of metabolic acidosis on renal function of fetal sheep. 65

AIZENMAN Elias, FROSCH Matthew P. & LIPTON Stuart A. Responses mediated by excitatory amino acid receptors in solitary retinal ganglion cells from rat. 75

CURTIN N.A., KOMETANI K. & WOLEDGE R.C. Effect of intracellular pH on force and heat production in isometric contraction of frog muscle fibres. 93

HERZIG Stefan, LÜLLMANN Heinz, MOHR Klaus & SCHMITZ Ralf Interpretation of [^{3}H]ouabain binding in guinea-pig ventricular myocardium in relation to sodium pump activity. 105

BLACKSHAW Susanna E. & THOMPSON S.W.N. Hyperpolarizing responses to stretch in sensory neurones innervating leech body wall muscle. 121

MECKLER Robert L. & WEAVER Lynne C. Characteristics of ongoing and reflex discharge of single splenic and renal sympathetic postganglionic fibres in cats. 139

STEIN Reuben D. & WEAVER Lynne C. Multi- and single-fibre mesenteric and renal sympathetic response to chemical stimulation of intestinal receptors in cats. 155

CHIU S.Y. Changes in excitable membrane properties in Schwann cells of adult rabbit sciatic nerves following nerve transection. 173

MCLAUGHLIN Stuart & WHITAKER Michael Cations that alter surface potentials of lipid bilayers increase the calcium requirement for exocytosis in sea urchin eggs. 189

CROOK J.M., LANGE-MALECKI B., LEE B.B. & VALBERG A. Visual resolution of macaque retinal ganglion cells. 205

BELGUM Jack H. & COPENHAGEN David R. Synaptic transfer of rod signals to horizontal and bipolar cells in the retina of the toad (*Bufo marinus*). 225

BALESTRINO M. & SOMJEN G.G. Concentration of carbon dioxide, interstitial pH and synaptic transmission in hippocampal formation of the rat. 247

JARAMILLO Fernán & SCHUETZE Stephen M. Kinetic differences between embryonic- and adult-type acetylcholine receptors in rat myotubes. 267

BICKNELL R.J., LENG G., LINCOLN D.W. & RUSSELL J.A. Naloxone excites oxytocin neurones in the supraoptic nucleus of lactating rats after chronic morphine treatment. 297

RAYNER Victoria C., ROBINSON I.C.A.F. & RUSSELL J.A. Chronic intracerebroventricular morphine and lactation in rats: dependence and tolerance in relation to oxytocin neurones. 319

GOLDEN F.ST.C. & TIPTON M.J. Human adaptation to repeated cold immersions. 349

POOLE David C., WARD Susan A. & WHIPP Brian J. Control of blood-gas and acid–base status during isometric exercise in humans. 365

KAUFMAN Susan & MONCKTON Elizabeth A. Effect of peripherally administered atriopeptin III on water intake in rats. 379

TAKANO Nariko Effects of pedal rate on respiratory responses to incremental bicycle work. 389

ALVAREZ DE TOLEDO Guillermo & LÓPEZ-BARNEO José Ionic basis of the differential neuronal activity of guinea-pig septal nucleus studied *in vitro*. 399

MAYER Mark L. & SUGIYAMA Kazuhide A modulatory action of divalent cations on transient outward current in cultured rat sensory neurones. 417

NUSSINOVITCH I. & RAHAMIMOFF R. Ionic basis of tetanic and post-tetanic potentiation at a mammalian neuromuscular junction. 435

ATHERTON J.C., BIELINSKA A., DAVISON J.M., HADDON I., KAY C. & SAMUELS R. Sodium and water reabsorption in the proximal and distal nephron in conscious pregnant rats and third trimester women. 457

BENNETT Max R. & HO Stephen The formation of topographical maps in developing rat gastrocnemius muscle during synapse elimination. 471

NOBLE R. & RIDDELL J.S. Cutaneous excitatory and inhibitory input to neurones of the postsynaptic dorsal column system in the cat. 497

FORSYTHE Ian D. & WESTBROOK Gary L. Slow excitatory postsynaptic currents mediated by *N*-methyl-D-aspartate receptors on cultured mouse central neurones. 515

HIRSCH Judith A. & OERTEL Donata Intrinsic properties of neurones in the dorsal cochlear nucleus of mice, *in vitro*. 535

HIRSCH Judith A. & OERTEL Donata Synaptic connections in the dorsal cochlear nucleus of mice, *in vitro*. 549

ABRAHAMS V.C., CLINTON R.J. & DOWNEY D. Somatosensory projections to the superior colliculus of the anaesthetized cat. 563

BRUM Gustavo & RIOS Eduardo Erratum: *Journal of Physiology* 387 (1987). 581

PROCEEDINGS OF THE PHYSIOLOGICAL SOCIETY

18–19 *September* 1987

Cambridge Meeting

DEMONSTRATIONS

Miall R.C A study of visuo-motor interactions involved in the steering responses of flying locusts. 2*P*

James P.S., Smith M.W. & Tivey D.R. Disaccharidase activity measurements carried out on intact isolated mouse intestinal villi. 3*P*

O'Donnell C.P. Estimation of mean circulatory filling pressure in the anaesthetized cat. 4*P*

Hughes S.W., Smith S.A. & Smith S.E. On-line analysis of electrocardiograph R-R intervals by microcomputer. 5*P*

Laughlin S.B. Investigating conductance changes of small diameter interneurones of the blowfly compound eye with a discontinuous current clamp. 6*P*

Hardie R.C. The use of local ionophoresis to identify neurotransmitter candidates in the housefly, *Musca domestica*. 7*P*

de Haan A., Hollander A.P. & Sargeant A.J. A computer-controlled system for isovelocity measurements of *in situ* rat skeletal muscles. 8*P*

Lamb T.D. & Matthews H.R. A real-time image processor: use with optical probes and in other physiological applications. 9*P*

Burrows M. Positive feedback from proprioceptors to leg motor neurones of the locust. 10*P*

McAuley J.H. Smooth anticipatory eye movements in man when no velocity information exists. 11*P*

Calleja D.J., Dent J., Titchen D.A. & Wood A.K.W. Sleeve manometry of a caudal thoracic oesophageal sphincter in sheep. 12*P*

Crawford A.C. & Fettiplace R. A substage cooling attachment for Zeiss IM microscopes. 13*P*

Matthews H.R. A linear stepping motor microscope stage translator for fast solution changes. 14*P*

Byrne S., Miall R.C. & Weir D.J. T.S.A.R. A programme of interactive time series analysis routines for physiological research. 15*P*

Ibu J.O. & Rutishauser S. Gastric acid secretion in streptozotocin-induced diabetic rats. 16*P*

COMMUNICATIONS

Dimaline R., Dockray G.J. & Green Tana The action of the cholecystokinin antagonist L364,718 on gastric emptying in the rat. 17*P*

Gregory P.C., McFadyen M. & Rayner D.V. Regulation of stomach emptying in pigs. 18*P*

Murray Brenda E., Roberts S.G.E., Rumsey R.D.E. & Shore P. The effect of dietary lipid on stomach-to-caecum transit time in rats. 19*P*

Brown Nicola J. & Richardson A. Effects of ileal infusion of fatty acids varying in chain length and saturation, on stomach-to-caecum transit time (SCTT) in the rat. 20*P*

Bronk J.R. & Hastewell J.G. Pyrimidine nucleoside uptake and metabolism by rings of rat jejunum. 21*P*

Desjeux J.F. & Nath S.K. Appearance of absorptive properties in a human secreting epithelial cell line HRT-18. 22*P*

Massey R.F. & Smart J.L. Effects of artificial rearing with milk substitutes on ileal enterocytes in rats. 23*P*

Giraldez F., Sepúlveda F.V. & Sheppard D.N. Ba^{2+} blockade of a large-conductance Ca^{2+}-activated K^+-channel from isolated *Necturus* enterocytes. 24*P*

James P.S. & Smith M.W. Rat jejunal lactase activity decreases biphasically during early post-weaning development. 25*P*

Mackenzie Neill M. Quantification of the expression of membrane-bound enzymes and the immunoglobulin receptor on brush borders from the rat jejunum during ontogeny using flow cytometry. 26*P*

Beechey R.B., Kemp R.B. & Shirazi-Beechey S.P. Changes in the intestinal transport activities of pre-ruminant lamb and adult sheep. 27*P*

Buddington R.K., Diamond J.M. & Toloza E.M. Changes in intestinal nutrient transport during ontogeny of the rabbit. 28*P*

Arnold C., Haffen K., Kedinger M., Rochette-Egly C. & Simon-Assmann P. Immunohistological localization of smooth-muscle actin during morphogenesis of normal rat and chimaeric (rat/chick and human/chick) intestines. 29*P*

Dantzer V. Møller O. & Skadhauge E. Morphological and enzymic adaptation to aldosterone of the epithelium of the caudal hindgut of the hen. 30*P*

Michell A.R. & Moss P. Responses to water restriction in sheep excreting sodium predominantly in urine or faeces; observations at three levels of sodium intake. 31*P*

Tadesse K. The effect of feeding galactose on intestinal lactase activity of the rat. 32*P*

Levin R.J., Nzegwu Helen C. & Young A. Proximal colon secretion in fed and fasted rats. 33*P*

Binder H.J. & Sweiry J.H. Effects of dietary-sodium depletion on potassium transport in rat distal colon *in vitro*: kinetics of K absorption and the regulatory role of K secretory channels. 34*P*

Blackshaw L.A. & Grundy D. Splanchno-vagal convergence on to gastrointestinally modulated vagal efferent units in the ferret. 35*P*

Kordy M.T., Mohiaddin R.H. & Sanford P.A. The influence of a bile acid on afferent nerve discharges from rat ileum *in vivo*. 36*P*

Anderson L.C. & Mixson E. Insulin stimulation of α-aminoisobutyric acid transport by isolated rat submandibular acinar cells. 37*P*

Mann G.E., Muñoz M. & Peran S. Cationic amino acid transport in the isolated perfused rat exocrine pancreas. 38*P*

Jarvis S.M. & Lee C.W. Characterization of adenosine transport into guinea-pig cerebral cortical synaptosomes. 39*P*

Wheeler C.P.D. & Yudilevich D.L. Uptake of uridine and its inhibition by nucleoside transport inhibitors in the perfused guinea-pig placenta. 40*P*

Gillespie J.I. & Greenwell J.R. Regulation of intracellular pH in isolated somites of the early chick embryo: evidence for Na^+/HCO_3^- co-transport. 41*P*

Duncan G., Marcantonio J.M. & Stewart S. pH and voltage modulate communication between tissue-cultured human lens epithelial cells. 42*P*

Sage S.O. Kinetics of ADP-evoked and thrombin-evoked rises in cytosolic calcium in human platelets: studies with manganese and nickel. 43*P*

Artalejo A.R. & Garcia-Sancho J. Mobilization of intracellular calcium by external ATP and by calcium ionophores in the Ehrlich ascites-tumour cell. 44*P*

Alonso M.T., Collazos J.M. & Sanchez A. Thrombin-induced cytoplasmic alkalinization in human platelets is not a prerequisite for Ca mobilization. 45*P*

Phillips M.E. & Taylor A. Colcemid inhibits the hydrosmotic response to vasopressin in isolated rabbit collecting tubules. 46*P*

Bernhardt I., Ellory J.C. & Hall A.C. Alterations to human erythrocyte passive cation permeability induced by decreasing ionic strength. 47*P*

Al-Gailani B.T. & Cotterrell D. Intracellular calcium and deformability of human red blood cell ghosts. 48*P*

Alvarado V., Behn C., Bonilla S., Celedon G., Kukuljan M. & Sanchez V. Role of C-7 chlorine in calcium-dependent interactions of 7-chlorotetracycline hydrochloride (CTC) with the human red cell membrane. 49*P*

Law R.O. A possible volume-regulatory Na-amino acid co-transporter in rat renal papillary cells. 50*P*

Charbardès Danielle, Griffiths Nina M., Imbert-Teboul Martine, Morel F. & Simmons N.L. Distribution of vasoactive intestinal polypeptide-sensitive adenylate cyclase activity along the rabbit kidney tubule *in vitro*. 51*P*

Bahinski A., Gadsby David C. & Nakao Masakazu Voltage independence of K translocation by the Na/K pump in isolated cells from guinea-pig ventricle. 52*P*

Cox H.M. & Cuthbert A.W. Antisecretory mechanisms of neuropeptide Y in rat intestinal epithelia. 53*P*

Grassi C. & Passatore M. Sympathetic nervous action on rabbit jaw muscles. 54*P*

Appenteng K. & Moore J.A. The electrical geometry of rat trigeminal motoneurones. 55*P*

Iles J.F. & Pisini J.V. Modulation of spinal reciprocal inhibition from the motor cortex in man. 56*P*

Cervero F., Handwerker H.O. & Laird J.M.A. Responses of dorsal horn neurones in the sacral spinal cord of the rat to noxious mechanical stimulation of the tail. 57*P*

Eyre J.A. & Koh T.H.H.G. Maturation of descending motor pathways in man from birth to adulthood. 58*P*

McMahon Stephen B. & Wall Patrick D. Descending excitation and inhibition of spinal cord lamina I projection neurones in the rat. 59*P*

Boden P., Hill R.G. & McBain C. Long-term organotypic cultures of rat hippocampal neurones display changes in neuronal excitability. 60*P*

Collingridge G.L. & Lester R.A.J. Properties of a dual-component synaptic response evoked by low-frequency stimulation in rat hippocampal slices. 61*P*

Moody C.I. & Sillito A.M. The role of the *N*-methyl-D-aspartate (NMDA) receptor in the transmission of visual information in the feline dorsal lateral geniculate nucleus (dLGN). 62*P*

Baker C.L., Hess R. & Zihl J. The 'motion-blind' human patient: peripheral filters. 63*P*

Miall R.C., Stein J.F. & Weir D.J. Movement planning in the monkey during a visuo-motor tracking task. 64*P*

O'Regan M.H. & Phillis J.W. Adenosine, β-oestradiol and rat cerebral cortical neurone excitability. 65*P*

Mullen K.T. & O'Sullivan E. Colour-contrast sensitivity across the human visual field. 66*P*

Bourdet C., Dehay C. & Kennedy H. Characteristics of inter- and intrahemispheric transient pathways in the young kitten. 67*P*

Javadnia Atefeh & Ruddock K.H. Simultaneous processing of pattern orientation and colour by the human visual system. 68*P*

Freeman R.D., Ohzawa I. & Robson J.G. A comparison of monocular and binocular inhibitory processes in the visual cortex of the cat. 69*P*

Hughes Sharon & Smith Margaret E. Effect of nerve section on β-endorphin and α-melanotropin immunoreactivity in motoneurones of normal and dystrophic mice. 70*P*

Lawson S.N. & McCarthy P.W. Substance P-like immunoreactivity is found in primary afferent neurones with Aδ- as well as those with C-fibres, in the rat *in vitro*. 71*P*

Baumann K.I., Hamann W. & Leung M.S. Differential suppression by neomycin of evoked response and ongoing activity in s.a. II mechanoreceptors in the cat. 72*P*

Iggo A. & Pacitti E.G. Effect of naloxone on the response of rat SA1 cutaneous mechanoreceptors to mechanical stimulation. 73*P*

Bradley P.M., Delisle Burns B. & Webb A.C. Responses of the intermediate part of the medial hyperstriatum ventrale in slices of chick brain maintained *in vitro*. 74*P*

Burrows M., Laurent G. & Watson A.H.D. The role of intersegmental interneurones in the transfer of mechanosensory information between local centres in the locust. 75*P*

Elzinga G., Stienen G.J.M. & Wilson M.G.A. Force production in isolated frog muscle fibres before and after chemical skinning. 76*P*

de Haan A., Jones D.A. & Sargeant A.J. Changes in power output during fatigue of rat medial gastrocnemius muscle. 77*P*

Colomo F., Lombardi V. & Piazzesi G. The mechanism of force generation during lengthening of tetanized frog single muscle fibres studied at different temperatures. 78*P*

Ashley C.C., Ishii N. & Simpson A.W.M. Measurement of intracellular free calcium concentration by fura2 in smooth-muscle cells isolated from the anterior byssus retractor muscle of *Mytilus*. 79*P*

Barsotti R.J., Kentish J.C., Lea T.J. & Mulligan I.P. Laser-induced photolysis of nitr-5 triggers calcium release from the sarcoplasmic reticulum of saponin-treated muscles from guinea-pig ventricle. 80*P*

Terrar D.A. & White E. Possible effects of calcium entry at positive potentials on contraction in voltage-clamped cells isolated from guinea-pig ventricular muscle. 81*P*

Achenbach C. & Daying Han Rate constants of beat-dependent sodium uptake and extrusion in sheep cardiac Purkinje fibres. 82*P*

Bekkers J.M., Forster I.C., Greeff N.G. & Keynes R.D. Non-inactivating sodium channels in the squid giant axon. 83*P*

Eisenberg R.S., Hainsworth Atticus H. & Levis R.A. Open-channel noise in a cation channel of frog lens epithelium. 84*P*

Dolphin A.C. & Scott R.H. Intracellular GTP-γ-S promotes agonist effects of calcium channel ligands on calcium channel currents in cultured rat sensory neurones. 85*P*

Anderson Peter A.V. Physiology and pharmacology of Na^+ and Ca^{2+} currents in neurones of a jellyfish. 86*P*

Marrion N.V. Probable role of a GTP-binding protein in mediating M-current inhibition by muscarine in rat sympathetic neurones. 87*P*

Lloyd Julia & Marshall Janice The influence of vasopressin on muscle microcirculation during systemic hypoxia in the rat. 88*P*

Obika L.F.O. Vasopressin is not involved in haemorrhage-induced hyperkalaemia in the rat. 89*P*

Bannister R., Bloom S.R., Cortelli P., Kooner J.S., Mathias C.J. & Raimbach Sarah J. The somatostatin analogue SMS 201-995 reduces oral glucose-induced hypotension in human autonomic failure. 90*P*

Mottershead J.P., Nye P.C.G. & Quirk P.G. The effects of almitrine on electron transport in mitochondria isolated from rat liver. 91*P*

Lepagnol J.M. & Weinachter S.N. *In vitro* and *in vivo* effects of almitrine on oxidative phosphorylation in mitochondria isolated from rat brain. 92*P*

Webber S.E. & Widdicombe J.G. The transport of albumin and dextran across the ferret isolated trachea *in vitro*. 93*P*

Davies Julia R. & Richardson P.S. Measurement of uptake of radiolabelled amino acids into secretory cells in the cat trachea. 94*P*

Ramsden C.A. & Walters D.V. Effect of amiloride on the balance between secretion and reabsorption of pulmonary liquid in the fetal and postnatal sheep. 95*P*

Aldridge R., Cady E.B., Cope M., Delpy D.T., Reynolds E.O.R., Richardson C.E., Wray Susan & Wyatt J.S. Simultaneous measurements of cerebral oxygenation and metabolites by near infrared (NIR) and ^{31}P nuclear magnetic resonance (NMR) spectroscopy during hypoxia in rats. 96*P*

Estavillo Jaime A. Changes in ventilation by increased venous CO_2 with constant arterial blood gases in the domestic fowl. 97*P*

McCormack D.G., Clarke B. & Barnes P.J. Characterization of adenosine receptors in human pulmonary arteries. 98*P*

Biscoe T.J., Duchen M.R., Eisner D.A., O'Neill S.C. & Valdeolmillos M. Cyanide increases $[Ca^{2+}]_i$ in isolated type I cells from the rabbit carotid body. 99*P*

Adams L., Green J.F., Schertel E.R. & Strong E.B. Does the tachypnoea of hypercapnia depend on feedback from pulmonary vagal afferent receptors in dogs? 100*P*

Armstrong D.J. & Kay I.S. Indomethacin potentiates the pulmonary chemoreflex responses to 5-HT in anaesthetized rabbits. 101*P*

Robbins P.A. Evidence for interaction between the peripheral and central chemoreceptors in man. 102*P*

Belyavin A.J., Duggan A. & Hayes P.A. The prediction of maximum oxygen uptake for both human sexes from measurements of submaximal heart rate and body composition. 103*P*

Bassey E.J. & Terry A.M. Blood lactate in relation to oxygen uptake during uphill treadmill walking in young and old women. 104*P*

McGeown J.G., McHale N.G. & Thornbury K.D. A study of arterial pulsation and lymph flow in an isolated sheep hindlimb preparation. 105*P*

Bennett T., Compton A.M. & Gardiner S.M. Effects of water deprivation on the regional haemodynamic responses to α-rat atrial natriuretic peptide (ANP) in conscious, unrestrained Brattleboro rats. 106*P*

Brown J. Tubular interactions of atrial peptide and captopril in man. 107*P*

Balfour W.E. Atrial natriuretic peptide (ANP) in the Brattleboro rat. 108*P*

Brownlee A.A., Lee G. & Mills Ivor H. Changes in renal function produced by the Na/K ATPase inhibitor bufalin when superimposed on infusion of atrial natriuretic peptide (ANP) in rats. 109*P*

Boland P.S. & Garland H.O. Effects of D- and L-glucose infusions on renal function in the rat. 110*P*

Shirley D.G. & Walter S.J. Acute changes in renal tubular function following unilateral nephrectomy in the rat. 111*P*

Edmunds M.E., Russell G.I. & Swales J.D. Measurement of vascular capacitance before and after surgical reversal of two-kidney, one-clip hypertension in rats. 112*P*

Macdonald I.A. & Mansell P.I. The effect of 48 h starvation on the cardiovascular and thermogenic responses to infused adrenaline in non-obese women. 113*P*

Cody F.W.J., Plant T. & Richardson Helen C. Electromyographic reflexes evoked in human wrist flexors by tendon extension and by joint rotation. 114*P*

Ekström J., Håkanson R., Månsson B. & Tobin G. Effects of a tachykinin antagonist on ferret salivary secretion. 115*P*

Gray P.T.A. Agonist-evoked oscillations of cytosolic free calcium in single rat parotid acinar cells. 116*P*

Asking B., Garrett J.R. & Proctor G.B. Effects of parotid stimulation on serum amylase in rats. 117*P*

Reid A.M. & Titchen D.A. Atropine-resistant parasympathetic responses of the ovine parotid and submaxillary glands. 118*P*

Kernan R.P. Effect of streptozotocin diabetes and of subsequent insulin injection on intracellular activities of sodium, potassium and hydrogen ions in rat soleus muscle. 119*P*

El-Bassiony S.F., El Nady A.H., El Nahas M.R., Mesiha R.Kh. & Metias E.F. Effect of verapamil on insulin release and on glucose uptake by adipose and muscle tissues in the rat. 120*P*

Abbas S.K., Caple I.W., Care A.D., Moniz C. & Pickard D.W. The control of parathyroid hormone-like activity in the fetal pig. 121*P*

Mitchell M.A. Possible mechanisms of stimulation of peripheral 5′-mono-deiodination by thyrotrophin-releasing hormone in the domestic fowl. 122*P*

Knight C.H. & McLelland Jean Effects of a concurrent pregnancy or of steroid hormone treatment on milk yield of mice undergoing extended lactation. 123*P*

Forsling Mary L., Peysner K. & Valentine P. The effects of acute administration of ovarian steroids on vasopressin secretion and fluid balance in the ovariectomized rat. 124*P*

Lightman S.L., Moratalla R. & Vallejo M. Vasopressin activates polyphosphoinositide metabolism in the brain stem of rats *in vivo*. 125*P*

Nicholson S.A. The influence of adenosine on the pituitary-adrenocortical axis in the rat. 126*P*

Bicknell R.J., Dyball R.E.J., Garten L.L., Heavens R.P., Sirinathsinghji D.J.S. & Zhao B.-G. Evidence for a direct noradrenergic projection from the brain stem to the neural lobe in the rat. 127*P*

POSTER COMMUNICATIONS

Falk G. & Shiells R.A. Electrophysiological evidence for light-dependent ADP-ribosylation in salamander rods: a control mechanism in phototransduction. 128*P*

Gemperlein R., Paul R. & Steiner A. Spectral sensitivity of insects studied with Fourier-interferometric stimulation (FIS). 129*P*

Gemperlein R., Paul R. & Steiner A. Spectral sensitivity of man studied with Fourier-interferometric stimulation (FIS). 130*P*

Cheney F.E., Still D.L., Thibos L.N. & Walsh D.J. What limits faithful encoding of spatial patterns in human peripheral vision? 131*P*

Bousez-Dumesnil Nicole, Fruchard Isabelle & Thorpe Simon Absolute luminance identification in humans. 132*P*

Bonnet C. & Sauvan X. Elements for a psychophysics of the curvilinear and rectilinear vections in man. 133*P*

Dobbins Janette & Wright M.J. Spatiotemporal inhomogeneity for motion and flicker in central and peripheral vision in humans. 134*P*

Lorenceau Jean Apparent speeds and directions of coherent motions. 135*P*

Hess R.F. & Pointer J.S. The contrast sensitivity gradient along the horizontal visual field in man. 136*P*

Hawken M.J., Parker A.J. & Simmons D.R. Human contrast thresholds for a stereoscopic depth-discrimination task are no higher than those for simple monocular detection. 137*P*

Parker A.J. & Yang Y. Spatial properties of stereo disparity pooling in human vision. 138*P*

Burr D.C., Morrone M. Concetta & Spinelli Donatella Phase sensitivity of the human visual system. 139*P*

Anderson S.J. & Burr D.C. Estimates of width and length of receptive fields of motion-sensitive mechanisms in human vision. 140*P*

Kiorpes Lynne & Movshon J. Anthony The development of vernier acuity and spatial resolution in infant monkeys (*Macaca nemestrina*). 141*P*

Cooper Anita M. & Thompson Ian D. Effects of intraocular injections of tetrodotoxin on the terminal arborization of retino-collicular axons in neonatal hamsters. 142*P*

Morrone M. Concetta & Speed Harriet D. The effect of visual experience on the development of cortical inhibition in cat. 143*P*

Murphy P.C. & Sillito A.M. The influence of feedback from the visual cortex on the length tuning of cells in the feline dorsal lateral geniculate nucleus (dLGN). 144*P*

Edelstyn N.M.J. & Hammond P. Correlation of texture-sensitive complex cells with cortical layering of feline striate cortex. 145*P*

Nistri A. & Sivilotti Lucia Effects of GABA and related drugs on the compound action potential of the frog optic nerve *in vitro*. 146*P*

Phillipson O.T. & Plummer C.J. Factors controlling retinal D1 and D2 dopamine receptors in the rat. 147*P*

Al-Balool Fawzia & Debnam E.S. Electrophysiology of the brush-border membrane of isolated rat jejunum following chronic and acute exposure to ethanol. 148*P*

Levin R.J. & Young A. Differential changes in electrogenic ion transport associated with progressive starvation and refeeding in the rat small intestine. 149*P*

López-Burillo S., O'Brien J.A. & Sepúlveda F.V. Effects of Ni^{2+} on Ca^{2+}-dependent activation of K^+ permeability in MDCK cells. 150*P*

Hutton Michael, Pilot Marie-Anne, Primi Marie-Pierre, Thompson Hilary & Zara Gian-Paolo Effects of alpha-2 agents and capsaicin on intestinal transit after laparotomy in the rat. 151*P*

Dashwood M.R., Sykes R. & Thompson C.S. Diabetes-induced changes in [^{125}I]insulin-binding sites in the intestinal tract of the rat: an autoradiographic study. 152*P*

Allerton C.A., Boden P. & Hill R.G. Actions of mu- and kappa-opioids on deep dorsal horn neurones in rat transverse spinal cord slice *in vitro*. 153*P*

Eyre J.A., Flecknell P.A., Kenyon B.R., Koh T.H.H.G. & Miller S. Effects of electromagnetic stimulation of the brain on cortical activity, cortical blood flow, blood pressure and heart rate in the cat. 154*P*

Baker J.R., Bremner F.D., Cole J.D. & Stephens J.A. Short-term synchronization of intrinsic hand muscle motor units in a 'Deafferented' man. 155*P*

Ben-Ari Y., Cherubini E. & Krnjević K. NMDA-evoked periodic inward currents in CA3 neurones of adult and immature rat hippocampal slice. 156*P*

Carter M.R., Rowe I.C.M. & Sedgwick E.M. D1 inhibition in man with spinal cord injury. 157*P*

Maxwell D.J. Glutamic acid decarboxylase-immunoreactive boutons are presynaptic to neurones with axons ascending the dorsal columns of the feline spinal cord. 158*P*

Constanti A. & Smart T.G. Zinc blocks the A-current in cultured rat sympathetic neurones. 159*P*

Bettaney J., Dray A. & Perkins M.N. Protein kinase C activation stimulates afferent Aδ and C-fibres in neonatal rat *in vitro*. 160*P*

Appenteng K. & Saha S. Retrograde transneuronal transport of wheat germ agglutinin into rat trigeminal interneurones. 161*P*

Batten T.F.C., McWilliam P.N. & Maqbool A. Distribution of calcitonin gene-related peptide (CGRP) like immunoreactivity in vagal motoneurones of the cat nucleus ambiguus. 162*P*

Kawenoki I., Pralong W.F. & Straub R.W. Effects of Ca^{2+} and adenosine on NADH fluorescence of isolated rabbit nerve fibres at rest and during activity. 163*P*

Terrar D.A. & White E. Currents and contractions at positive potentials in cells isolated from guinea-pig ventricular muscle. 164*P*

Boyett M.R., Kirby M.S. & Orchard C.H. Evidence for a calcium-activated component of the 'second inward current' in isolated ferret ventricular myocytes. 165*P*

Larmet Y. & Pichon Y. Lack of potassium accumulation in fresh axons of *Loligo forbesi*. 166*P*

Ettema G. & Huijing P.A. Influence of amplitude of quick releases on compliance measurement of rat EDL muscle-tendon complex. 167*P*

Cameron N.E., Flook V., McNairn F. & Turner K.J. Investigations of muscle activity and oxygen consumption during cold exposure in man. 168*P*

Daniel P.M., Guthrie D.L., Pleasance S.E. & Warley Alice A comparison between the diminished number of lymphocytes in the blood of streptozotocin- and genetically diabetic rats. 169*P*

Lightman S.L. & Seckl J.R. Effect of intracerebroventricular oxytocin on milking-induced oxytocin secretion in the goat. 170*P*

Brown P.D., Dho S., Elliott A.C. & Lau K.R. Acetylcholine causes a transient intracellular acidosis in isolated acini from rabbit mandibular salivary gland. 171*P*

Bianchini L., Ellory J.C. & Hall A.C. Stimulation of volume-sensitive KCl transport in trout hepatocytes. 172*P*

McGlone F. & Sandle G.I. Comparison of the effects of pure mineralocorticoid and glucocorticoid hormones on Na^+ and K^+ transport in isolated rat distal colon. 173*P*

Fry D.J. & Shaw S.R. Effects of anisotonic media on cell volume in oocytes isolated from the amphibians *Bufo bufo* and *Xenopus laevis*. 174*P*

Hutchings M.E. The gerbil as an animal model of otitis media with effusion. 175*P*

Bennett T., Gardiner S.M. & Tomlinson K.C. Long Evans (LE) and Brattleboro (DI) rats respond differently to administration of streptozotocin (STZ). 176*P*

McCullough J.S. & McHale N.G. Pressure flow relationships in isolated bovine mesenteric lymphatics during field stimulation. 177*P*

Biscoe T.J., Duchen M.R., Kirby G.C., Patterson D.L. & Ponte J. Voltage-clamp study of the effects of cyanide on dissociated Type I cells of the rabbit carotid body. 178*P*

Barnes P.J., Chung K.F., Lammers J.-W.J., McCusker M. & Minette P. Non-adrenergic bronchodilator mechanisms in man. 179*P*